EPSON®

9-pin Dot Matrix Printer

DFX-9000

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Seiko Epson Corporation. The information contained herein is designed only for use with this Epson printer. Epson is not responsible for any use of this information as applied to other printers.

Neither Seiko Epson Corporation nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of: accident, misuse, or abuse of this product or unauthorized modifications, repairs, or alterations to this product, or (excluding the U.S.) failure to strictly comply with Seiko Epson Corporation's operating and maintenance instructions.

Seiko Epson Corporation shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original Epson Products or Epson Approved Products by Seiko Epson Corporation.

EPSON and EPSON ESC/P are registered trademarks of Seiko Epson Corporation.

Microsoft®, Windows®, and Windows NT® are registered trademarks of Microsoft Corporation.

IBM is a registered trademark of International Business Machines Corporation.

General Notice: *Other product names used herein are for identification purposes only and may be trademarks of their respective owners. Epson disclaims any and all rights in those marks.*

Copyright © 2004 Seiko Epson Corporation. All rights reserved.

Reference Guide

Contents

Chapter 1 ***Safety Instructions***

Warnings, Cautions, and Notes 6
Hot Parts Caution Symbol 6
Important Safety Instructions 6

Chapter 2 ***Paper Handling***

Using the Two-Tractor System 11
 Positioning the paper supply 12
 What paper types you can use 13
Loading Paper onto the Front Tractor 13
Loading Paper onto the Rear Tractor 20
Adjusting the Paper Position 26
 Adjusting the top-of-form position 27
 Adjusting the printing position 29
 Adjusting the label position 30
Tearing Off the Printed Pages 31
 Using the Tear Off button 32
 Adjusting the tear-off position 32
Switching Between Front and Rear Tractors 35
Changing the Paper 37
Printing on Multi-Part Forms and Labels 39
 Using multi-part forms 40
 Using labels 42

Chapter 3 ***Printer Software***

About Your Printer Software 43
Using the Printer Driver with Windows Me, 98, and 95 44
 Accessing the printer driver from Windows applications . . 44
 Accessing the printer driver from the Start menu 46

Changing the printer driver settings 47
Using the Printer Driver with Windows XP, 2000, and Windows NT 4.0 48
Accessing the printer driver from Windows applications . . .49
Accessing the printer driver from the Start menu 51
Changing the printer driver settings 53
Printer Driver Settings Overview 54
Using EPSON Status Monitor 3 58
Setting up EPSON Status Monitor 3 59
Accessing EPSON Status Monitor 3 60
Installing EPSON Status Monitor 3 61
Setting Up Your Printer on a Network 62
Sharing the printer 62
Setting up your printer as a shared printer 63
Setting for the clients 67
Installing the printer driver from the CD-ROM 75
Canceling Printing 76
Uninstalling the Printer Software 77
Uninstalling the printer driver and EPSON Status Monitor 3 77

Chapter 4 ***Control Panel***

Buttons and Lights 82
Selecting a Font and Pitch 86
About Your Printer's Settings 87
Understanding the printer's settings 87
Changing the printer's settings 98
Lock-Out Mode 103
Turning on or off the lock-out mode 103

Chapter 5 ***Problem Solver***

Diagnosing the Problem 104
Using the error indicators 105
EPSON Status Monitor 3 106
Printing a Self Test 107

Printing Hex Dump. 108
Problems and Solutions. 109
Power supply problems 110
Paper loading or feeding problems 111
Printing position problems 113
Printing or printout quality problems 115
Option using problems. 120
Network problems 121
Correcting USB Problems 121
Clearing Paper Jams. 125
Aligning Vertical Lines in Your Printout 126
Canceling Printing 127
Contacting Customer Support 128
Technical Support Web Site 129

Chapter 6 ***Options and Consumables***

Ribbon Cartridge 130
Genuine Epson ribbon cartridge. 130
Replacing the Ribbon Cartridge. 130
Using the Pull Tractor 135
Installing the pull tractor 135
Using the pull tractor with the front tractor 138
Using the pull tractor with the rear tractor 142
Removing the pull tractor 144
Using the Perforation Cutter. 145
Installing the perforation cutter 146
Attaching the perforated paper output attachment and output tray 149
Paper handling. 152
Removing the perforation cutter. 154
Interface Cards 157
Installing an interface card. 158
Using a serial interface card. 160
Print Server 161
Setting the IP address from the control panel. 161

Printer Parts 163
Printer Specifications 166
Mechanical 166
Electronic 168
Electrical 170
Environmental 171
Paper 171
Printable area 181
Command Lists 183
EPSON ESC/P control codes 183
IBM PPDS emulation control codes 185
Standards and Approvals 186
Cleaning the Printer 186
Transporting the Printer 187

Glossary

Index

Chapter 1

Safety Instructions

Warnings, Cautions, and Notes



Warnings
must be followed carefully to avoid bodily injury.



Cautions
must be observed to avoid damage to your equipment.

Notes
contain important information and useful tips on the operation of your printer.

Hot Parts Caution Symbol



This symbol is placed on the print head to indicate that it may be hot. Never touch this part just after the printer has been used. Let it cool for a few minutes before touching it.

Important Safety Instructions

Read all of these safety instructions before using the printer. In addition, follow all warnings and instructions marked on the printer itself.

When setting up the printer

- ❏ Because the printer weights approximately 34 kg, you should not lift or carry it alone. Two people should carry it by the bottom.

- ❏ Do not place the printer on an unstable surface or near a radiator or heat source.

- ❏ Place the printer on a flat surface. The printer will not operate properly if it is tilted or placed at an angle.

- ❏ Do not place this product on a soft, unstable surface like a bed or a sofa, or a small, enclosed area, as this restricts ventilation.

- ❏ Do not block or cover the slots and openings in the printer's cabinet, and do not insert objects through the slots.

- ❏ Use only the type of power source indicated on the printer's label. If you are not sure of the power supply specifications in your area, contact your local power company or consult your dealer.

- ❏ Connect all equipment to properly grounded electrical outlets. Avoid using outlets on the same circuit as photocopiers or air control systems that regularly switch on and off.

- ❏ Do not use a damaged or frayed power cord.

- ❏ The power cord should be placed to avoid abrasions, cuts, fraying, crimping, kinking, and other damage.

- ❏ If you use an extension cord with the printer, make sure the total ampere rating of all devices plugged into the extension cord does not exceed the cord's ampere rating. Also, make sure the total ampere of all devices plugged into the electrical outlet does not exceed the electrical outlet's ampere rating.

- ❏ Use only the power cord that comes with this product. Use of another cord may result in fire or electric shock.

- ❏ This product's power cord is for use with this product only. Use with other equipment may result in fire or electric shock.

When maintaining the printer

- ❏ Unplug the printer before cleaning it, and always clean it with a piece of damp cloth only.

- ❏ Do not spill liquid onto the printer.

- ❏ Except as specifically explained in this guide, do not attempt to service the printer yourself.

- ❏ Unplug the printer and refer servicing to qualified service personnel under the following conditions:

 i. If the power cord or plug is damaged.

 ii. If liquid has entered the printer.

 iii. If the printer has been dropped or the cabinet damaged.

 iv. If the printer does not operate normally or exhibits a distinct change in performance.

- ❏ Adjust only those controls that are covered by the operating instructions.

- ❏ If you plan to use the printer in Germany, observe the following:

 To provide adequate short-circuit protection and over-current protection for this printer, the building installation must be protected by a 16-amp circuit breaker.

Bei Anschluss des Druckers an die Stromversorgung muss sichergestellt werden, dass die Gebaudeinstallation mit einer 16 A-Sicherung abgesichert ist.

When Handling the paper

- ❏ Never feed labels backward using the Micro Feed▼ button. When fed backward, labels can easily peel off the backing sheet and cause a paper jam.

- ❏ Because labels are sensitive to temperature and humidity, use them only under normal operating conditions described below:

Temperature	15 to 25°C (59 to 77°F)
Humidity	30 to 60% RH

- ❏ Do not leave labels loaded in the printer between jobs; they may curl around the platen and jam when you resume printing.

- ❏ Do not load paper that is curled or has been folded.

When operating the printer

- ❏ Adjust only those controls that are covered in the user documentation. Improper adjustment of other controls may result in damage requiring extensive repair by a qualified technician.

- ❏ Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise, you may damage the printer.

- ❏ Do not turn off the printer while it is printing the self test. Always press the Pause button to stop printing and then turn off the printer.

- ❏ Do not turn off the printer while it is printing the hex dump. Always press the Pause button to stop printing and then turn off the printer.

- ❏ Do not reconnect the power cord to an electrical outlet that has the wrong voltage for your printer.

- ❏ Never replace the print head yourself; you may damage the printer. Also, other parts of the printer must be checked when the print head is replaced.

- ❏ You need to move the print head by hand to replace the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.

ENERGY STAR® Compliance



As an ENERGY STAR® Partner, Epson has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

The International ENERGY STAR® Office Equipment Program is a voluntary partnership with the computer and office equipment industry to promote the introduction of energy-efficient personal computers, monitors, printers, fax machines, copiers, scanners, and multifunction devices in an effort to reduce air pollution caused by power generation. Their standards and logos are uniform among participating nations.

Chapter 2

Paper Handling

Using the Two-Tractor System

Your printer's paper handling system consists of a front push tractor and a rear push tractor. Both tractors are easy to load and operate, and both accommodate a wide variety of paper types, including labels and multi-part forms.

The printer automatically adjusts to the thickness of the paper loaded when the Platen gap setting is set to Auto in the SelecType mode. See "SelecType mode" on page 88 for details.

You can print on continuous paper from 3 inches (76.2 mm) to 16.5 inches (419.1 mm) wide. Your printer senses the paper width automatically.

When using more than two types of paper, load the paper you use most often onto the front tractor. The front tractor, which is easier to reach, will be available for the paper you change more frequently.

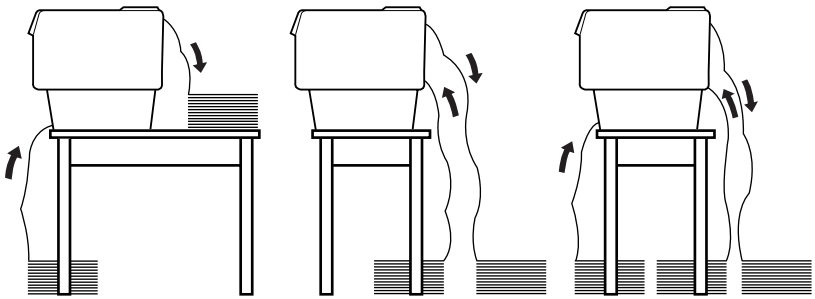
Note:

- ❏ *Before using your paper, check that it matches the specifications described in this manual. See "Paper" on page 171 for details. Also make sure your paper has a straight edge.*
- ❏ *If continuous paper is fed past the sprocket (on the last page, for example), the paper may not feed properly.*
- ❏ *When the optional perforation cutter (#C81507X) is installed, the printable width is from 4 inches (101.6 mm) to 16 inches (406.4 mm).*

Positioning the paper supply

You can load continuous paper from both the front and the rear, so be sure to leave enough room around the printer for the two stacks of fresh paper and for the printed stack. Make sure you align your paper supply with the paper loaded in the tractor so the paper feeds smoothly into the printer.

The following illustration shows three ways to position your printer and paper: with the front tractor loaded, with the rear tractor loaded, and with both tractors loaded.



Note:

- ❏ *When loading paper from the front, be sure to put the paper someplace that is lower than the stand where the printer is placed. Placing the paper on the same level as the printer or higher may cause a paper jam.*

- ❏ *Make sure that your stack of printed pages does not interfere with the rear tractor's paper supply.*

What paper types you can use

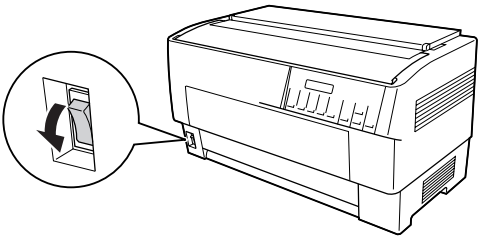
You can use the continuous paper types listed below.

Continuous Paper Types	Front Tractor	Rear Tractor
Single-sheet	available	available
Multi-part	available	available
Labels	available	available
Continuous forms with labels	available	available
Overlapping multi-part forms	available	available

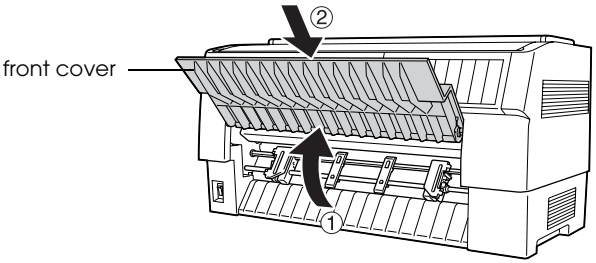
Loading Paper onto the Front Tractor

Follow these steps to load paper onto the front tractor:

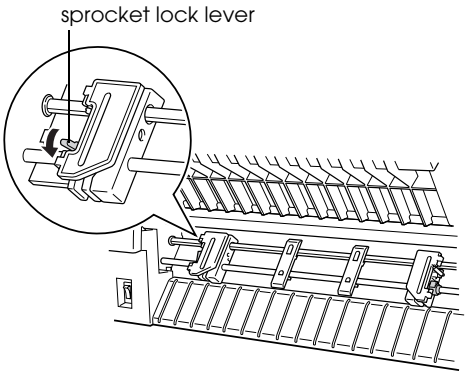
1. Turn off the printer.



2. Open the printer's front cover by lifting up the middle of its bottom edge until it locks in place, as shown below.

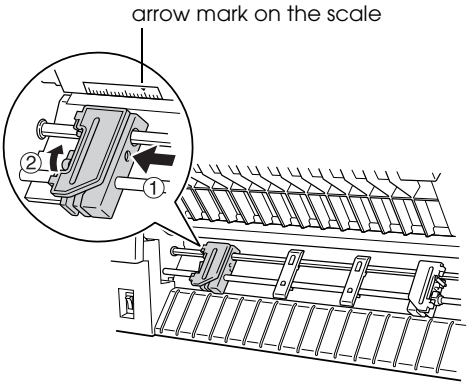


3. Release the sprocket lock levers on both the right and left sprockets by pulling each lever down.

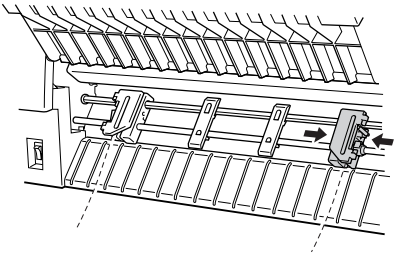


Caution:
Do not try to pull on or remove the elastic cord from the tractor.

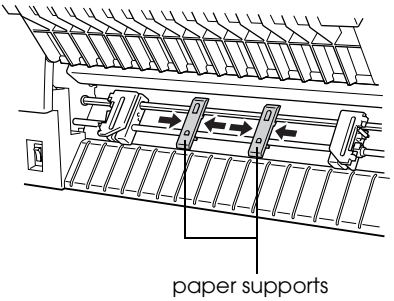
4. Position the left sprocket so that the sprocket pins are to the left of the arrow mark on the scale. Lock it into place by pushing up the sprocket lock lever.



5. Now slide the right sprocket to approximately match the width of your paper. (Do not lock it in place yet.)

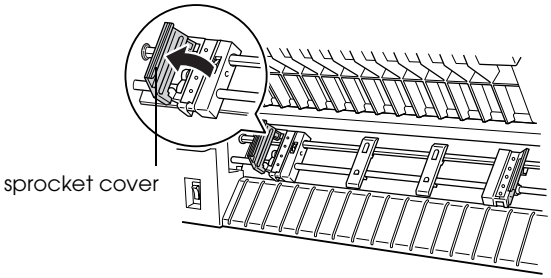


6. Slide the two paper supports so that they are spaced evenly between the two sprockets.

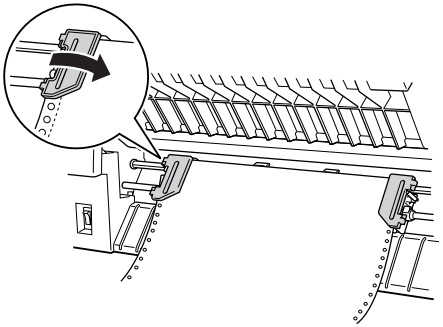


Note:
To use the paper that is less than four inches wide, remove the paper supports.

7. Open both sprocket covers.

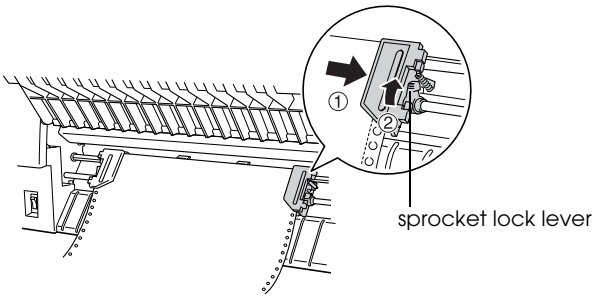


8. Be sure your paper has a clean, straight edge, and then fit the first few holes in the paper over the sprocket pins as shown below. The side of the paper that you want to print on should be facing you. Now close the sprocket covers.



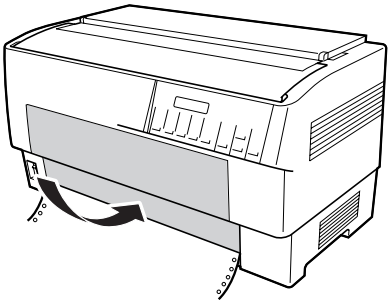
Note:
When loading paper from the front, be sure to put the paper someplace that is lower than the stand where the printer is placed. Placing the paper on the same level as the printer or higher may cause a paper jam.

9. Slide the right sprocket so that the paper is straight and has no wrinkles. Lock the sprocket in place by pushing up the sprocket lock lever. After you lock the right sprocket, it may still move slightly; this is normal.



Note:
Be careful not to pull the paper too tightly when adjusting the right sprocket.

10. Pull the printer's front cover out slightly and lower it until it is closed.

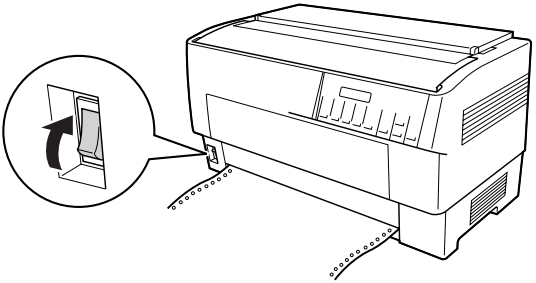


Caution:

- ❏ *Do not push the front cover directly down; always pull it out slightly before closing.*

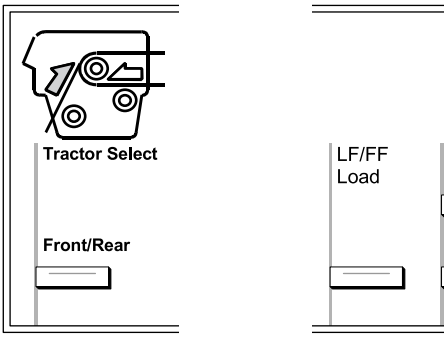
- ❏ *Before turning on the printer, be absolutely sure you have removed all protective materials. (See the Unpacking instructions that are provided with the printer for more details.) Turning on the printer while the print head cannot move may seriously damage the mechanism.*

11. Turn on the printer. The print head moves to the left and the LCD turns on. Also, either the front or rear tractor arrow on the Tractor Select indicator lights up, depending on which tractor was selected when the printer was turned off last.



12. Check the Tractor Select indicator to see which tractor is selected:

 If the front tractor arrow light is red, press the LF/FF Load button to load the paper.



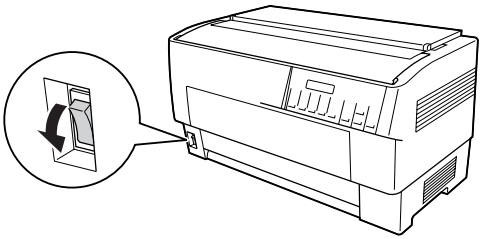
 If the rear tractor arrow light is red, press the Front/Rear button to switch to the front tractor. When the printer switches tractors, it also loads the paper automatically.

The Tractor Select indicator changes to green. The paper is now loaded to the top-of-form position. If it looks like the printing will start too high or low on the page, adjust the paper position. See "Adjusting the Paper Position" on page 26 for instructions.

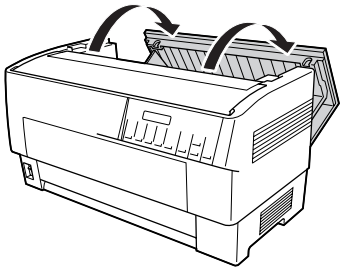
Loading Paper onto the Rear Tractor

Follow the steps below to load paper onto the rear tractor. (You do not need to remove the paper from the front tractor first.)

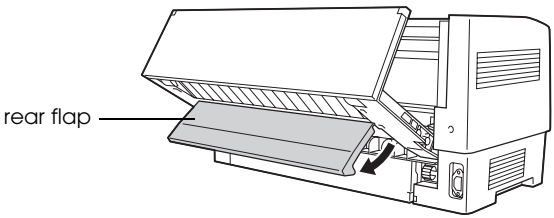
1. Turn off the printer.



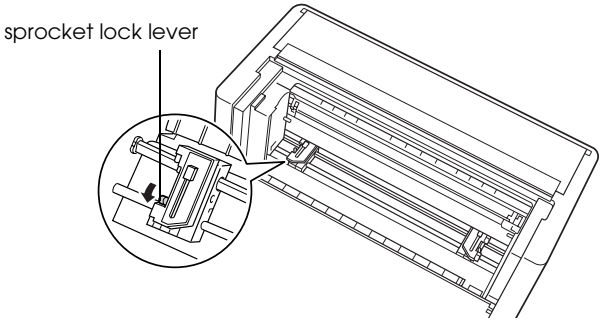
2. Open the printer's top cover as shown below.



3. Open the rear flap at the back of the top cover.

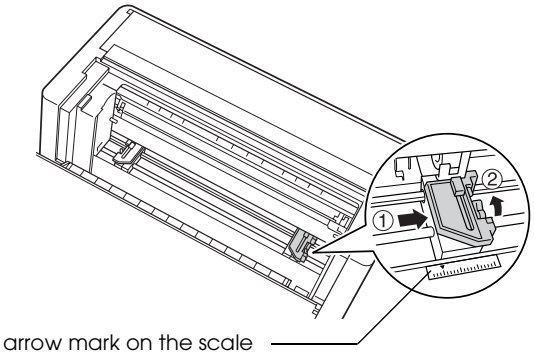


4. Release the sprocket lock levers on the rear tractor's right and left sprockets by pulling each lever forward.

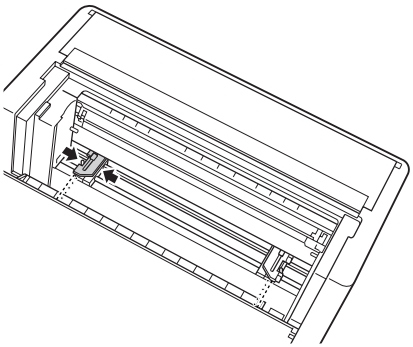


Caution:
Do not try to pull on or remove the elastic cord from the tractor.

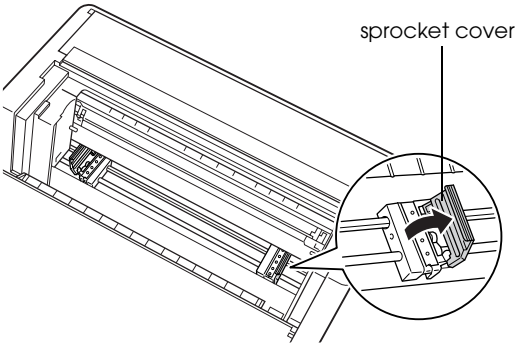
5. Position the right sprocket so that the sprocket pins are to the right of the arrow mark on the scale. Lock it in place by pushing the sprocket lock lever back.



6. Now slide the left sprocket to approximately match the width of your paper. (Do not lock it in place yet.)

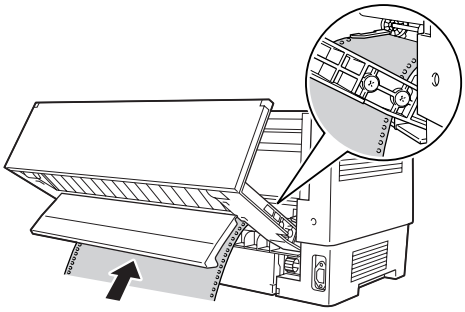


7. Open both sprocket covers.

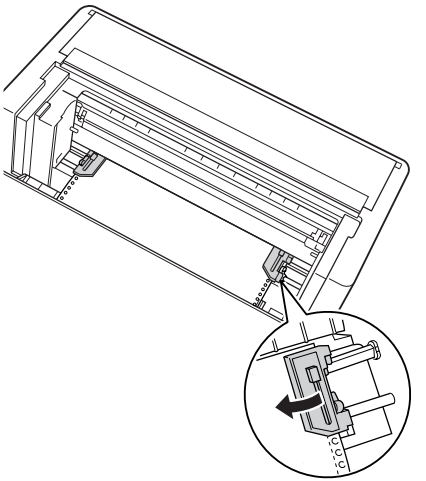


8. Make sure your paper has a clean, straight edge. With the side of the paper you want to print on facing down, insert your paper through the opening at the rear of the printer.

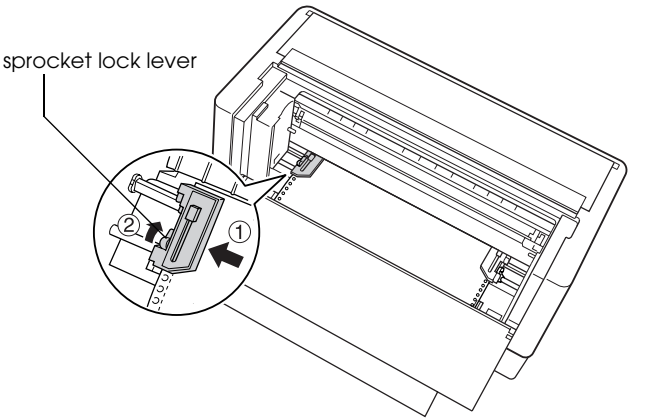
 Note:
 You may find it easier to load the paper by standing to the side. That way you can feed the paper with one hand and pull it through with the other.



9. Fit the first few holes in the paper over the sprocket pins as shown below. Now close the sprocket covers.

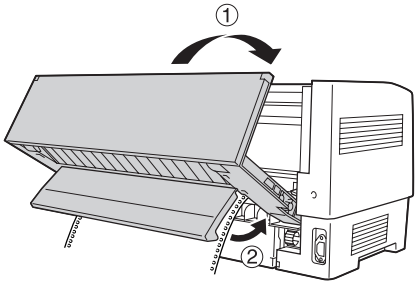


10. Slide the left sprocket to remove any slack in the paper. Make sure the paper is straight and has no wrinkles. Push the sprocket lock lever back to lock the sprocket in place. After you lock the left sprocket, it may still move slightly; this is normal.

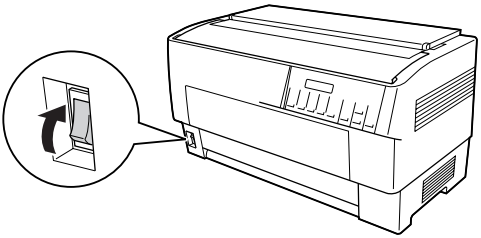


Note:
Be careful not to pull the paper too tightly when adjusting the left sprocket.

11. Close the top cover and the rear flap. The paper is now loaded in the standby position.

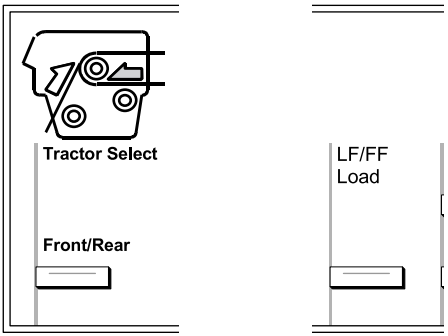


12. Turn on the printer. The print head moves to the left and the LCD turns on. Also, either the front or rear tractor arrow on the Tractor Select indicator lights up, depending on which tractor was selected when the printer was turned off last.



13. Check the Tractor Select indicator to see which tractor is selected:

If the rear tractor arrow light is red, press the LF/FF Load button to load the paper.



If the front tractor arrow light is red, press the Front/Rear button to switch to the rear tractor. When the printer switches tractors, it also loads the paper automatically.

The Tractor Select indicator changes to green. The paper is now loaded to the top-of-form position. If it looks like the printing will start too high or low on the page, adjust the paper position. See "Adjusting the Paper Position" on page 26 for instructions.

Adjusting the Paper Position

You can adjust the top-of-form position as well as the printing position at any point on the page by using the Micro Feed, and Top of Form buttons. The printer then remembers the new top-of-form position. When you use the optional pull tractor, you can adjust the paper position as described below.

Note:
The printing position (based on the top-of-form position) is controlled by your software. To change the print position, adjust your software's print settings. Use the following procedure only if your software does not allow print position adjustment.

Adjusting the top-of-form position

The top-of-form position is the position to which the printer feeds the paper when it loads it or performs a form feed. This position is important because it determines where the printing begins on each page. If the printing is too high or low on the page, you can adjust the top-of-form position either permanently or temporarily depending on how you use the Top of Form button.

- When you want to *permanently* change the top-of-form position, you enter the top-of-form mode using the Top of Form control panel button. The printer remembers the new top-of-form position even after the printer is turned off, reset, or initialized. (The printer remembers separate top-of-form positions for the front and rear tractors.)

- When you want to *temporarily* change the top-of-form position, you adjust the position using the Micro Feed buttons during pause status without entering top-of-form mode. The printer remembers the temporary top-of-form position until the next time you load paper, switch tractors, or turn off the printer.

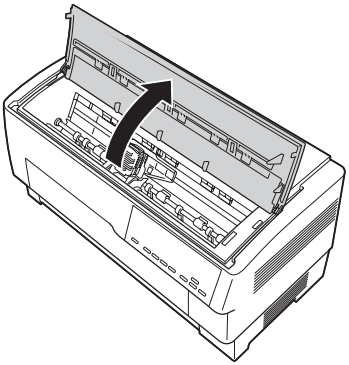
You can set the top-of-form position from 4.2 mm (0.17 inch) to 33.9 mm (1.33 inch) below the top edge of the paper. The factory setting is 8.5 mm (0.33 inch).

Follow the steps below to reset (permanently change) the top-of-form position.

Caution:
To adjust the top-of-form position when you are printing on labels, continuous forms with labels, or overlapping multi-part forms, use the Micro Feed▲ *button only; do not enter the top-of-form mode. Never feed labels backward through the printer.*

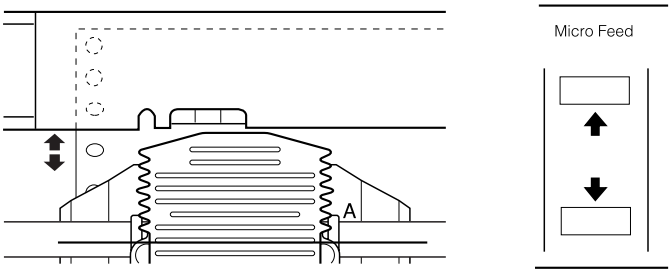
1. Make sure the printer is turned on and the desired tractor is selected (the corresponding tractor arrow should be lit).

2. Open the upper cover.



3. Press the Top of Form button to enter top-of-form mode. The printer beeps once, and the Top of Form light turns on.

4. Use the Micro Feed buttons to feed the paper to the desired top-of-form position. The letter "A" on the ribbon protector shows you where the bottom edge of your first line of text will print. This position is based on the first printable line of text. If your software inserts a top margin of five lines, your text will actually print five lines below the top-of-form position.



5. Press the Top of Form button again to exit and save your new top-of-form position. Then close the top cover.

Note:
If you enter top-of-form mode right after loading paper, you can set the loading and top-of-form positions at the same time. (When you use the optional pull tractor, you cannot adjust the loading position.)

Adjusting the printing position

You may need to adjust the printing position in the middle of a page, or to adjust the top-of-form position when using labels.

When you move the printing position, you temporarily change the top-of-form position by the same amount. For example, if you adjust the printing in the middle of the page so that it falls a half-inch lower, the next page will begin printing a half-inch lower as well. The printer remembers this temporary top-of-form position until the next time you load paper, switch tractors, or turn off the printer. To adjust the printing position or top-of-form position, follow these steps:

1. Start printing your document. When you reach the text that you want to align at a particular spot on the page, press the Pause button to stop printing.

2. Use the Micro Feed buttons to adjust the position where you want your next line of text to fall. Press the button once to feed the paper forward or backward in 1/216-inch increments, or hold it down to move the paper continuously.

 Caution:
 To adjust the printing position when you are printing on labels, continuous forms with labels, or overlapping multi-part forms, use the Micro Feed▲ *button only. Never feed labels backward through the printer. When fed backward, labels may easily peel off the backing sheet and cause a paper jam.*

3. When you are finished, press the Pause button to resume printing your document.

Adjusting the label position

Follow the steps below to adjust the label position:

Note:
See "Changing the settings in the SelecType mode" on page 98 to find how to make settings in the SelecType mode and see "Changing the settings in the default-setting mode" on page 101 to find how to make settings in the default-setting mode.

1. Make sure that the printer is turned on.

2. Set the position for the settings listed below in the default-setting mode.

 Label base pos.

 Label top pos.

 Label length

 Label left pos.

 Label width

 Base sheet PG (Base sheet PG position number)

 Label paper PG (Label paper PG position number)

3. Make the settings in the SelecType mode as shown below.

Forms w/labels:	On
Pge length front:	paper length when using the front tractor
Pge length rear:	paper length when using the rear tractor

Tearing Off the Printed Pages

After you finish printing, you can use the tear-off feature to advance continuous paper on the push tractor to the tear-off edge of the printer. You can then easily tear off printed sheets. When you resume printing, the printer automatically feeds paper back to the loading position.

This feature lets you save paper that would normally be lost between documents.

If the perforation between pages is not aligned with the tear-off edge, you can adjust the tear-off position using the micro-feed feature. The printer remembers this new tear-off position.

Caution:
Never use the tear-off feature to reverse feed labels, overlapping multi-part forms, or continuous forms with labels.

Using the Tear Off button

Whether or not the printer is in tear-off mode, you can use the Tear Off button to advance continuous paper to the tear-off position by following the steps below.

1. Make sure printing has finished. Then press the Tear Off button. The printer advances the paper to the tear-off edge and the Tear Off light comes on.

2. Tear off all printed pages. If the perforation is not aligned with the tear-off edge, adjust the tear-off position. See "Adjusting the tear-off position" on page 32 for instructions.

3. When you resume printing, the printer feeds the paper back to the loading position and begins printing. (You can also manually feed the paper back to the loading position by pressing the Tear Off button again.)

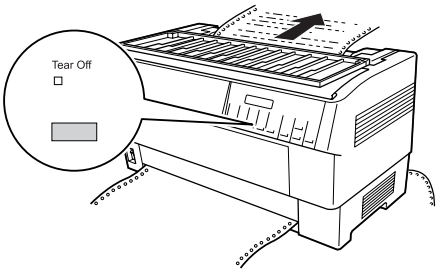
Adjusting the tear-off position

If the paper's perforation is not aligned with the tear-off edge, follow these steps:

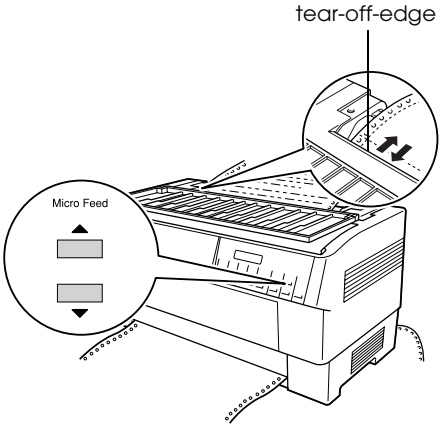
1. Turn on the printer and select the desired tractor.

2. Open the paper separator cover (the flap on the top part of the printer's top cover). This exposes the printer's tear-off edge.

3. Press the Tear Off button to enter the tear-off mode. The Tear Off light comes on and the printer feeds the paper's perforation to the printer's tear-off edge.

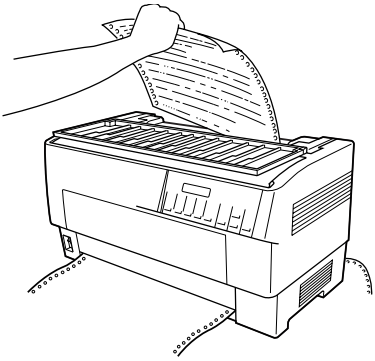


4. If the paper is not aligned with the tear-off edge, press the Micro Feed buttons to feed the paper forward or backward in 1/216-inch increments. (You can also hold down either Micro Feed button to feed the paper continuously.)



Note:
You can reset the tear-off position only when you are in tear-off mode (after you press the Tear Off *button once and the* Tear Off *light is on). The printer remembers the new tear-off position even after the printer is turned off, reset, or initialized.*

5. Tear off the page using the tear-off edge on the printer's top cover.



6. Press the Tear Off button to feed the paper back to the top-of-form position. You are now ready to print your next document.

Caution:
Always tear off the printed document before you feed the paper back to the top-of-form position. Never feed paper backward more than one page.

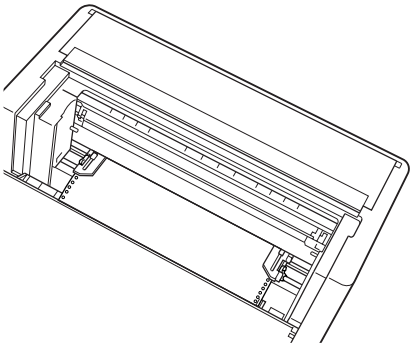
Switching Between Front and Rear Tractors

You can easily switch between paper loaded on the front tractor and paper loaded on the rear tractor. The instructions below explain how to switch from the front tractor to the rear tractor, but you can follow the same steps to switch from the rear tractor to the front tractor.

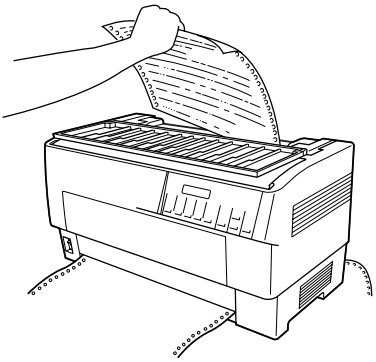
Caution:
Never switch between tractors if labels are already loaded in the printer. First remove the labels by tearing off the fresh supply below the tractor and pressing LF/FF Load *to eject the remaining labels.*

Before you start, make sure the printer is turned on and that the front tractor is selected (the front tractor arrow on the Tractor Select indicator should be lit). If you are in the middle of printing a document, wait for the printer to finish printing before you switch tractors. Then follow these steps:

1. If no paper is loaded in the rear tractor, load paper to the standby position (the first five pins of the sprockets). See "Loading Paper onto the Rear Tractor" on page 20 for instructions.

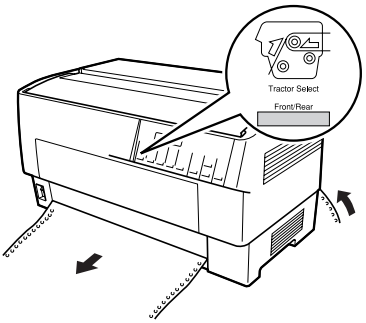


2. If you have a printed document or excess paper still in the printer, use the tear-off feature described in the previous section to tear off the document or excess paper.



Caution:
Always tear off the printed document and any excess paper before switching tractors. Never feed more than one page backward through the printer.

3. Press the Front/Rear button to switch to the rear tractor. The front-loaded paper automatically feeds back to the standby position and the rear-loaded paper advances to the top-of-form position.



Changing the Paper

This section describes how to change paper on the front tractor, but you can follow the same steps when you change the paper on the rear tractor.

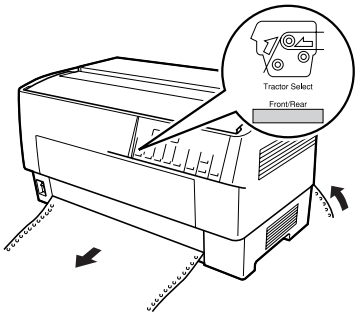
Before you start, make sure the printer is turned on and the front tractor is selected. (If you are changing the paper on the rear tractor, the rear tractor should be selected instead.)

Caution:
Never change paper using this procedure if labels, continuous forms with labels, or overlapping multi-part forms are already loaded in the printer. Remove the labels by tearing off the fresh supply below the tractor and pressing LF/FF Load *to eject the remaining labels. Then load the new paper. See "Loading Paper onto the Front Tractor" on page 13 (or "Loading Paper onto the Rear Tractor" on page 20) for instructions.*

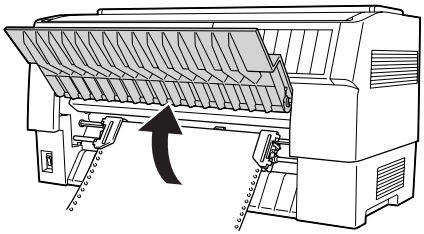
1. If you have a printed document still in the printer, use the tear-off feature to tear off the document or excess paper.

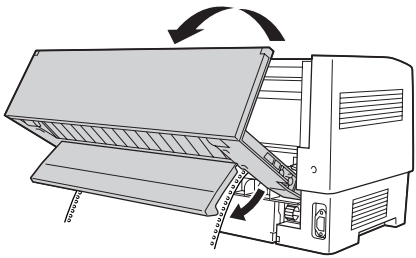
 Caution:
 Always tear off printed documents before changing the paper. Never feed more than one page backward through the printer.

2. Press the Front/Rear button to switch to the rear tractor. The front-loaded paper automatically feeds back to the standby position.

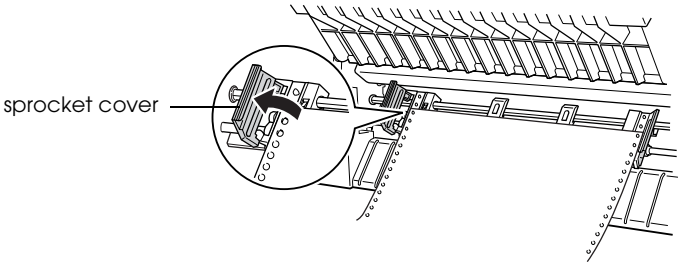


3. Open the printer's front cover. (To change the rear-loaded paper, open the printer's top cover and the rear flap.)





4. Open the sprocket covers and remove the paper from the tractor.



5. Load the new paper. See "Loading Paper onto the Rear Tractor" on page 20 (or "Loading Paper onto the Front Tractor" on page 13) for instructions.

Printing on Multi-Part Forms and Labels

Your printer can print on both single-sheet and continuous multi-part forms, as well as on labels.

You can print on various types of paper, including multi-part forms and labels. Your printer can also handle a variety of paper thicknesses, from thin paper to ten sheets (or seven sheets on the rear tractor) including the original. The printer automatically adjusts to the thickness of your paper when the Platen gap setting is set to Auto in the SelecType mode. See "SelecType mode" on page 88 for details.

When you print on multi-part forms and labels, the positioning of your text on the page can be critical. See "Adjusting the Paper Position" on page 26 for more information on aligning your text. You should also check both your printer and your software page length settings before you load labels or forms.

If you are using multi-part forms or labels, you may want to use the optional pull tractor. See "Using the Pull Tractor" on page 135 for details.

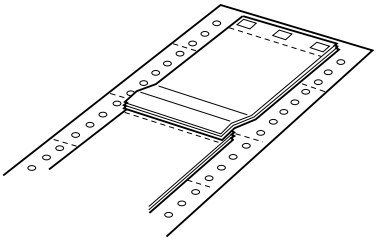
Caution:
When printing on labels, be absolutely sure that your printing stays within the printable area of the label to prevent damage to the print head. See "Paper" on page 171 for more information on the printable area.

Using multi-part forms

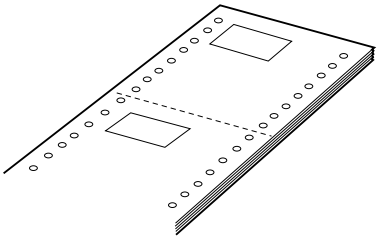
You can use multi-part (carbonless or carbon-backed) forms with up to seven sheets, including the original, on the rear tractor. On the front tractor, you can use forms with up to ten sheets.

You load continuous multi-part forms the same way you load any other type of continuous paper. Before loading multi-part forms, however, make sure the paper has a clean straight edge and does not separate or tear apart. See "Loading Paper onto the Front Tractor" on page 13 or "Loading Paper onto the Rear Tractor" on page 20 for instructions.

The DFX-9000 can print on multi-part forms that vary in thickness, such as forms with labels on them or forms that overlap slightly where they are glued together. These forms are thicker in the label area and in the places where they overlap or are joined together, as shown below. When you use forms with labels, set the `Continuous forms with labels` setting to `On`. When you use overlapping multi-part forms, set the `Overlapping multipart forms` setting to `On` and the `Platen gap` setting to `0` to `14` according to the paper thickness you are using. See "Changing the settings in the SelecType mode" on page 98 for details.



Overlapping multi-part forms



Continuous forms with labels

Caution:
Be sure to set the Overlapping multi-part forms setting or Continuous forms with Label setting to `On` before you print on the respective forms. See "Changing the settings in the SelecType mode" on page 98 for instructions.

When you print on these forms, make sure that the printing fits within the printable area and that the top-of-form position is set properly. See "Paper" on page 171 for more information about the printable area.

Using labels

When selecting labels for printing, always choose the type mounted on continuous paper with sprocket holes for use with a tractor. See "Loading Paper onto the Front Tractor" on page 13 for instructions for loading continuous paper.



Caution:
Never use the Tear Off, Front/Rear, *or* Micro Feed▼ *button when labels are loaded in the printer. Never feed labels backward through the printer because they can easily come off the backing and jam the printer.*

Although you must never feed labels backward, you can still use the automatic paper handling features if you follow these precautions:

- ❏ Instead of using the Tear Off button to remove printed labels, press the LF/FF Load button until the last printed label is at the point where you can tear it off easily.

- ❏ Before using the Front/Rear button to switch tractors or change paper, remove the entire supply of labels. Remove labels by tearing off the fresh supply at a perforation below the tractor. Then press the LF/FF Load button to eject the remaining labels.

- ❏ When adjusting the top-of-form or printing position, use only the Micro Feed▲ button.



Caution:
Because labels are especially sensitive to extreme temperatures and humidity, use them only under normal operating conditions.

Chapter 3

Printer Software

About Your Printer Software

The Epson software includes the printer driver software and EPSON Status Monitor 3.

The printer driver is software that allows your computer to control the printer. You need to install the printer driver so your Windows software applications can take full advantage of the printer's capabilities.

EPSON Status Monitor 3 program allows you to monitor the status of your printer, alerts you when errors occur, and provides you with troubleshooting tips. EPSON Status Monitor 3 is automatically installed when you install the printer driver. If you want to install EPSON Status Monitor 3 later, see "Installing EPSON Status Monitor 3" on page 61 for instructions.

Note:

- ❏ *The network printers can not be monitored with EPSON Status Monitor 3 in Windows 95.*
- ❏ *Before proceeding, make sure you have installed the printer driver on your computer described in the Start Here.*
- ❏ *Make sure the software setting is set to ESC/P. The printer driver software and EPSON Status Monitor 3 can only function in ESC/P mode.*

Using the Printer Driver with Windows Me, 98, and 95

You can access the printer driver from your Windows applications or from the Start menu.

- ❏ When you access the printer driver from a Windows application, any settings you make apply only to the application you are using. See "Accessing the printer driver from Windows applications" on page 44 for more information.

- ❏ When you access the printer driver from the Start menu, the printer driver settings you make apply to all your applications. See "Accessing the printer driver from the Start menu" on page 46 for more information.

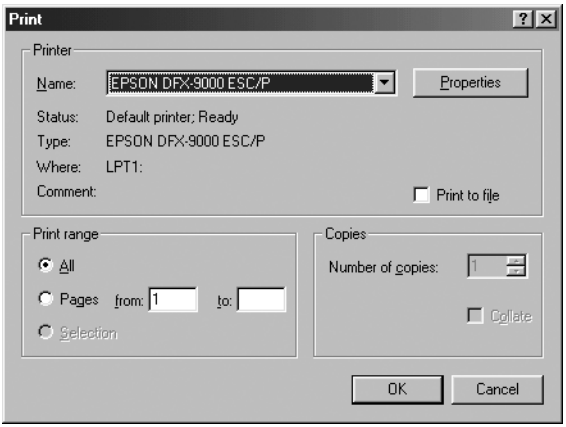
See "Changing the printer driver settings" on page 47 to check and change printer driver settings.

Note:
While many Windows applications override the settings made with the printer driver, some do not, so you must verify that the printer driver settings match your requirements.

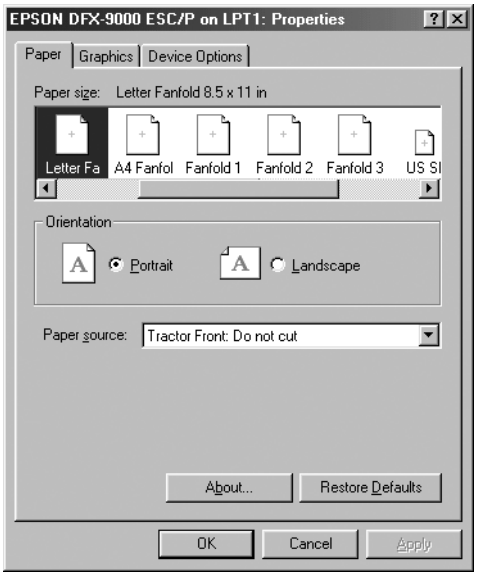
Accessing the printer driver from Windows applications

Follow these steps to access the printer driver from a Windows application:

1. Select Print Setup or Print from the File menu of your application software. In the Print or Print Setup dialog box displayed, make sure that your printer is selected in the Name drop-down list.



2. Click Printer, Setup, Properties, or Options. (The button you click depends on your application and you may need to click a combination of these buttons.) The Properties window appears, and you see the Paper, Graphics, and Device Options menus. These menus contain the printer driver settings.



3. To view a menu, click the corresponding tab at the top of the window. See "Changing the printer driver settings" on page 47 for information on how to change the settings.

Accessing the printer driver from the Start menu

Follow these steps to access the printer driver from the Start menu:

1. Click the Start button, and then point to Settings.

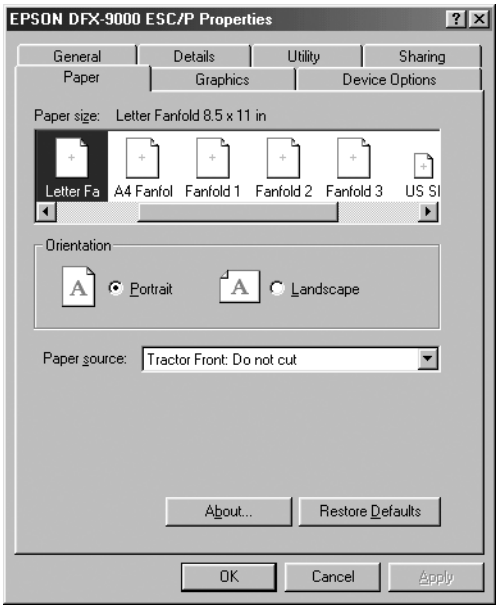
2. Click Printers.

3. Right-click your printer icon, and click Properties. The screen displays the Properties window, which contains the Paper, Graphics, Device Options, and Utility menus. These menus display the printer driver settings.

4. To view a menu, click the corresponding tab at the top of the window. See "Changing the printer driver settings" on page 47 for information on how to change the settings.

Changing the printer driver settings

Your printer driver has seven menus: Paper, Graphics, Device Options, General, Details, Utility, and Sharing. For an overview of the available settings, see "Printer Driver Settings Overview" on page 54. You can also view online help by right-clicking items in the driver and selecting What's this?



When you finish making printer driver settings, click OK to apply the settings, or click Restore Defaults to return the settings to their default values.

Once you have checked your printer driver settings and made any necessary changes, you are ready to print.

Using the Printer Driver with Windows XP, 2000, and Windows NT 4.0

You can access the printer driver from your Windows applications or from the Start menu.

- ❏ When you access the printer driver from a Windows application, any settings you make apply only to the application you are using. See "Accessing the printer driver from Windows applications" on page 49 for more information.

- ❏ When you access the printer driver from the Start menu, the printer driver settings you make apply to all your applications. See "Accessing the printer driver from the Start menu" on page 51 for more information.

To check and change printer driver settings, see "Changing the printer driver settings" on page 53.

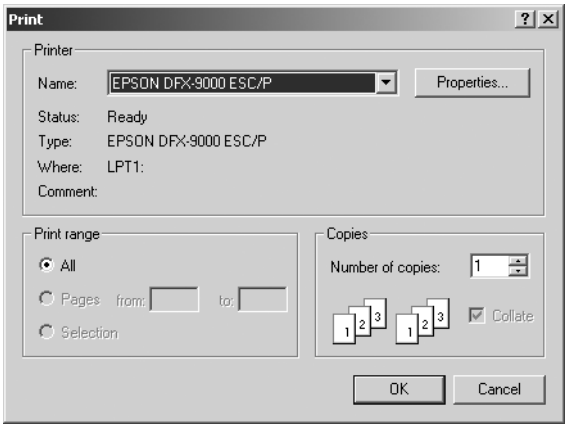
Note:
While many Windows applications override the settings made with the printer driver, some do not, so you must verify that the printer driver settings match your requirements.

Accessing the printer driver from Windows applications

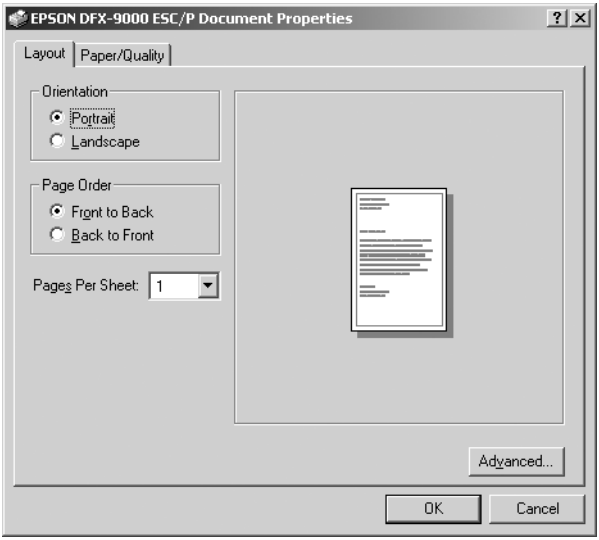
Follow these steps to access the printer driver from a Windows application:

Note:
The examples in the following section are from the Windows 2000 operating system. They may vary in appearance from what actually appears on your screen; however, the instructions are the same.

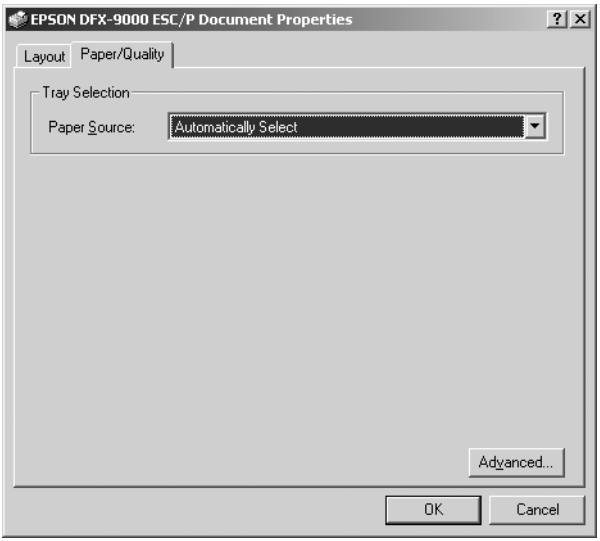
1. Select Print Setup or Print from the File menu of your application software. In the Print or Print Setup dialog box displayed, make sure that your printer is selected in the Name drop-down list.



2. Click Printer, Setup, Properties, or Options. (The button you click depends on your application and you may need to click a combination of these buttons.) The Document Properties window appears, and you see the Layout and Paper/Quality menus. These menus contain the printer driver settings.



3. To view a menu, click the corresponding tab at the top of the window. See “Changing the printer driver settings” on page 53 to change the settings.



Accessing the printer driver from the Start menu

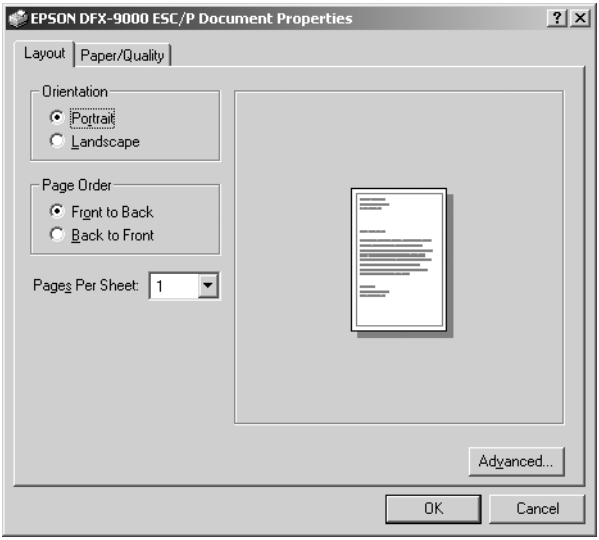
Follow these steps to access the printer driver from the Start menu:

Note:
The screen shots used in this procedure are from the Windows 2000 operating system. They may vary in appearance from what actually appears on your screen; however, the instructions are the same.

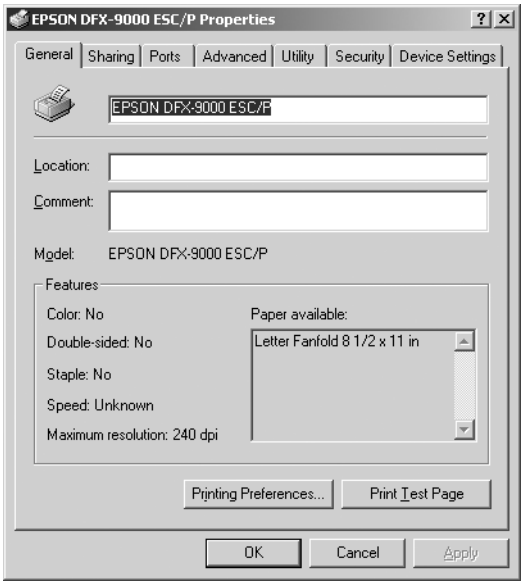
1. Click the Start button, and then point to Settings.

2. Click Printers.

3. Right-click your printer icon, and click Printing Preferences (in Windows XP or 2000) or Document Defaults (in Windows NT 4.0). The screen displays the Default Document Properties window, which contains the Layout and Paper/Quality menus. These menus display the printer driver settings.



When you click Properties in the menu displayed by right-clicking the printer icon, the Properties window appears, which includes menus used to make the printer driver settings.



4. To view a menu, click the corresponding tab at the top of the window. See "Printer Driver Settings Overview" on page 54 for information on how to change the settings.

Changing the printer driver settings

Your printer driver has two menus from which you can change the printer driver settings; Layout and Paper/Quality. You can also change settings on the Utility menu in the printer software. For an overview of the available settings, see "Printer Driver Settings Overview" on page 54. You can also view online help by right-clicking items in the driver and selecting What's this?

When you finish making your printer driver settings, click OK to apply the settings, or click Cancel to cancel your changes.

Once you have checked your printer driver settings and changed them if necessary, you are ready to print.

Printer Driver Settings Overview

The following tables show the Windows printer driver settings. Note that not every setting is available in all versions of Windows.

Printer settings

Settings	Explanations
Paper Size	Select the size of the paper you want to use. If you do not see your paper size, use the scroll bar to scroll through the list. If your paper size is not included in the list, see "Definition of Custom Paper Size" on page 56 for instructions.
Orientation	Select Portrait or Landscape.
Paper Source	Select the paper source you want to use.
Resolution/ Graphics Resolution	Select the printing resolution you want. The higher the resolution you select, the more detailed your printout will be; however, increasing the resolution slows printing.
Dithering	You can leave this option set to Fine, which is the default setting, or select another dithering pattern depending on the kind of printout you want.
Intensity	Move the slider to make your printout lighter or darker.
Print Quality	Select a print quality option from the Print quality list. If you set Hi-speed to On, you will enter bidirectional printing mode and printing speed will increase. Setting Hi-speed to Off will return the printer to unidirectional printing mode. Printing speed will decrease, but printing precision will improve. Printing with the default settings uses the settings stored in the printer.
Halftone Setup.../Halftone Color Adjustment...	Click this button to set the brightness and contrast, input the RGB gamma, or make other settings. The Halftone Color Adjustment dialog box appears. For details, click the Help button in this dialog box.
Halftoning	Select the type of halftoning to use when printing graphics. To let the printer determine the best halftone quality, use Auto Select.

Settings	Explanations
Printer Fonts Support	Select a character table group to use. You can select one of three character table groups, Standard, Expanded, and None (Bit Image printing). When Standard or Expanded is selected, the printer uses the device fonts. Expanded includes more fonts than Standard. When None is selected, the printer uses bit map images instead of the device fonts. For details on the fonts which are included in each table, see "Electronic" on page 168.
Print Text as Graphics*	Select Off when the printer uses the device fonts and select On when the printer does not use the device fonts.
Metafile Spooling*	Select whether to use EMF spooling.
Paper Order*	Select whether to print from front to back or back to front.
Pages Per Sheet*	Select the number of pages that you want to print onto a single page.
Copy Count*	When you select more than one in the Number of copies box, this check box appears and you can select whether to collate the pages of the copies.
Advanced Printing Features*	Select Enable or Disable for the metafile Spooling.
Print Optimizations*	Select Disable when the printer uses the device fonts and select Enable when the printer uses the device fonts.

* For details, see Windows help.

Definition of Custom Paper Size

If your paper is not included in the Paper Size drop-down list, you can add the size to the list.

For Windows Me, 98, and 95:

Click Custom or User Defined Size and enter the paper size in the dialog box that appears.

For Windows XP, 2000, and Windows NT 4.0:

1. For Windows 2000 or Windows NT 4.0, click Start, point to Settings, and click to Printers.

 For Windows XP Professional, click Start, and click Printers and Faxes.

 For Windows XP Home Edition, click Start, and click Control Panel, then click Printers and Faxes.

2. Click the EPSON DFX-9000 ESC/P icon.

3. Select Server Properties from the file menu.

4. Check the Create a New Form.

5. Enter the paper size in the Measurement fields.

6. Click Save From and then click OK.

Monitoring settings

Settings	Explanations
EPSON Status Monitor 3	You can access EPSON Status Monitor 3 when you click this button. To monitor the printer, make sure the Monitor the printing status check box is selected.
Monitoring Preferences	Click this button to open the Monitoring Preferences dialog box where you can make settings for EPSON Status Monitor 3. See "Setting up EPSON Status Monitor 3" on page 59 for more information.

Using EPSON Status Monitor 3

EPSON Status Monitor 3 is available for Windows XP, Me, 98, 95, 2000, and Windows NT 4.0. It allows you to monitor your printer's status, alerts you when printer errors occur, and provides troubleshooting instructions when needed.

EPSON Status Monitor 3 is available only when:

- ❏ The printer is connected directly to the host computer via the parallel port [LPT1] or the USB port.
- ❏ Your system is configured to support bidirectional communication.

EPSON Status Monitor 3 is installed when you install the printer driver as described in the *Start Here*.

Note:
If you install the driver using the "Point and Print" method, EPSON Status Monitor 3 may not function properly. If you want to use EPSON Status Monitor 3, reinstall the driver as described in the Start Here.

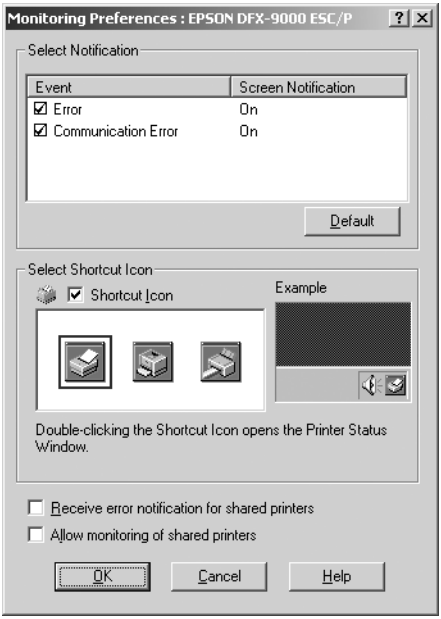
Before using EPSON Status Monitor 3, be sure to read the README file on the User CD-ROM. This file contains the latest information on the utility.

Setting up EPSON Status Monitor 3

Follow these steps to set up EPSON Status Monitor 3:

1. Open the Utility menu as described in "Using the Printer Driver with Windows Me, 98, and 95" on page 44 or "Using the Printer Driver with Windows XP, 2000, and Windows NT 4.0" on page 48.

2. Click the Monitoring Preferences button. The Monitoring Preferences dialog box appears.



3. The following settings are available:

Select Notification	Displays the error item check box On/Off status. Turn on this check box to display the selected error notification.
Select Shortcut Icon	The selected icon is displayed on the taskbar. The setting's example is shown on the right window. By clicking the shortcut icon, you can access the Monitoring Preferences dialog box easily.
Receive error notification for shared printers	Error notification for a shared printer can be received when this check box is selected.
Allow monitoring of shared printer	When this check box is selected, a shared printer can be monitored by other PCs.

Note:
Click the Default *button to revert all items to the default settings.*

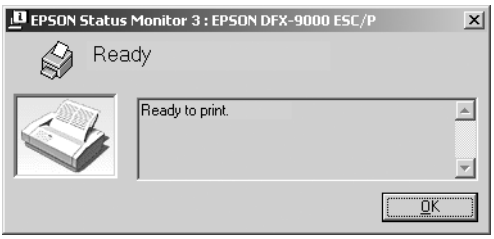
Accessing EPSON Status Monitor 3

Do one of the following to access EPSON Status Monitor 3;

- ❏ Double-click the printer-shaped shortcut icon on the taskbar. To add a shortcut icon to the taskbar, go to the Utility menu and follow the instructions.

- ❏ Open the Utility menu, then click the EPSON Status Monitor 3 icon. To find out how to open the Utility menu, See "Using the Printer Driver with Windows Me, 98, and 95" on page 44 or "Using the Printer Driver with Windows XP, 2000, and Windows NT 4.0" on page 48.

When you access EPSON Status Monitor 3 as described above, the following printer status window appears.



You can view printer status information in this window.

Installing EPSON Status Monitor 3

Follow the steps below to install EPSON Status Monitor 3.

1. Make sure that the printer is off and that Windows is running on your computer.

2. Insert the printer software CD-ROM in the CD-ROM drive.

 Note:
 - ❏ *If the language selection window appears, select your country.*

 - ❏ *If the EPSON Installation Program screen does not appear automatically, double-click the* My Computer *icon, right-click the CD-ROM icon, click* OPEN *in the menu that appears, then double-click* Epsetup.exe.

3. Click Continue. When the software license agreement screen appears, read the statement, then click Agree.

4. Click Custom.

5. Select the EPSON Status Monitor 3 check box, then click Install.

6. In the dialog box that appears, make sure that your printer icon is selected, and click OK. Then follow the on-screen instructions.

7. When the installation is complete, click OK.

Setting Up Your Printer on a Network

Sharing the printer

This section describes how to share the printer on a standard Windows network.

The computers on a network can share a printer that is directly connected to one of them. The computer that is directly connected to the printer is the printer server, and the other computers are the clients which need permission to share the printer with the printer server. The clients share the printer via the printer server.

According to the versions of Windows OS and your access rights on the network, perform the appropriate settings of the printer server and clients.

Setting the printer server

❏ For Windows Me, 98, or 95, see "With Windows Me, 98, or 95" on page 63.

❏ For Windows XP, 2000, or Windows NT 4.0, see "With Windows XP, 2000, or Windows NT 4.0" on page 65.

Setting the clients

- ❏ For Windows Me, 98, or 95, see "With Windows Me, 98, or 95" on page 68.
- ❏ For Windows XP or 2000, see "With Windows XP or 2000" on page 70.
- ❏ For Windows NT 4.0, see "With Windows NT 4.0" on page 73.

Note:

- ❏ *When sharing the printer, be sure to set EPSON Status Monitor 3 so that the shared printer can be monitored on the printer server. See "Setting up EPSON Status Monitor 3" on page 59.*
- ❏ *When you are Windows shared printer user in a Windows* Me or 98 *environment, on the server, double-click the* Network *icon in Control panel and make sure that the "File and printer sharing for Microsoft Networks" component is installed. Then, on the server and clients, make sure that the "IPX/SPX-compatible Protocol" or the "TCP/IP Protocol" is installed.*
- ❏ *The printer server and clients should be set on the same network system, and they should be under the same network management beforehand.*
- ❏ *The on-screen displays on the following pages may differ depending on the version of Windows OS.*

Setting up your printer as a shared printer

With Windows Me, 98, or 95

When the printer server's OS is Windows Me, 98, or 95, follow these steps to set the printer server.

1. Click Start, point to Settings, and click Control Panel.
2. Double-click the Network icon.

3. Click File and Print Sharing on the Configuration menu.

4. Select the I want to be able to allow others to print to my printer(s). check box, then click OK.

5. Click OK to accept the settings.

Note:

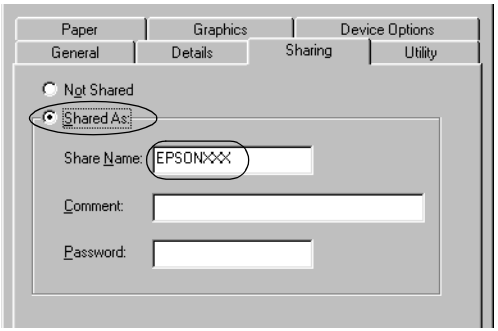
❏ *When "Insert the Disk" appears, insert the Windows Me, 98, or 95 CD-ROM in the computer. Click* OK *and then follow the on-screen instructions.*

❏ *When the prompt to restart the computer appears, restart the computer and continue with the settings.*

6. Double-click the Printers icon on the control panel.

7. Right-click your printer icon, and click Sharing in the menu that appears.

8. Select Shared As, type the name in the Share Name box, and click OK. Type a Comment and Password if needed.



Note:

❏ *Do not use spaces or hyphens for the share name, or an error may occur.*

❏ *When sharing the printer, be sure to set EPSON Status Monitor 3 so that the shared printer can be monitored on the printer server. See "Setting up EPSON Status Monitor 3" on page 59.*

You need to set the client computers so that they can use the printer on a network. See the following pages for details.

❏ "With Windows Me, 98, or 95" on page 68

❏ "With Windows XP or 2000" on page 70

❏ "With Windows NT 4.0" on page 73

With Windows XP, 2000, or Windows NT 4.0

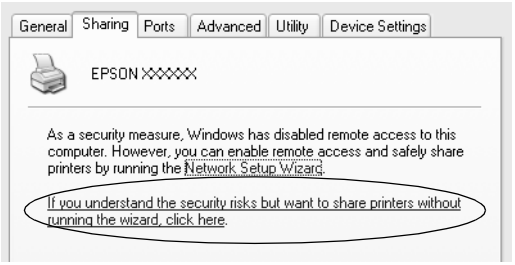
When the printer server's OS is Windows XP, 2000, or Windows NT 4.0, follow these steps to set the printer server.

Note:
You must access Windows XP, 2000, or Windows NT 4.0 as the Administrators of the local machine.

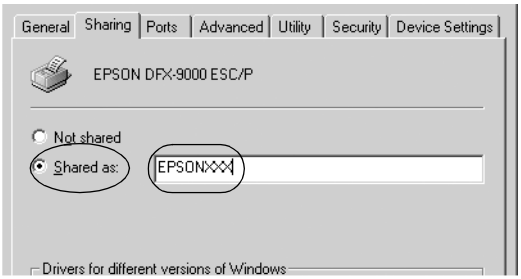
1. For a Windows 2000 or Windows NT 4.0 printer server, click Start, point to Settings, and click Printers.
 For a Windows XP Professional printer server, click Start, and click Printers and Faxes.
 For Windows XP Home Edition printer server, click Start, click Control panel, then click Printers and Faxes.

2. Right-click your printer icon, and click Sharing in the menu that appears.

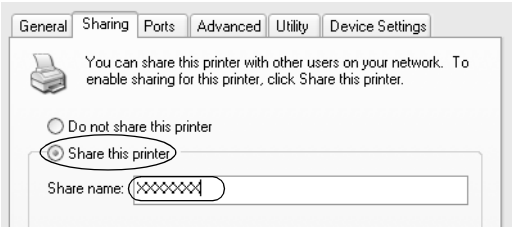
For Windows XP, if the following menu appears, click either Network Setup Wizard or If you understand the security risks but want to share printers without running the wizard, click here.
In either case, follow the on-screen instructions.



3. For a Windows 2000 or Windows NT 4.0 printer server, select Shared as (for Windows 2000) or Shared (for Windows NT 4.0), then type the name in the Share name box and click OK.



For a Windows XP printer server, select Share this printer, then type the name in the Share name box and click OK.



Note:
Do not use spaces or hyphens for the share name, or an error may occur.

You need to set the client computers so that they can use the printer on a network. See the following pages for details:

❏ "With Windows Me, 98, or 95" on page 68

❏ "With Windows XP or 2000" on page 70

❏ "With Windows NT 4.0" on page 73

Setting for the clients

This section describes how to install the printer driver by accessing the shared printer on a network.

Note:
❏ *To share the printer on a Windows network, you need to set the printer server. For details, see "Setting up your printer as a shared printer" on page 63 (Windows Me, 98, or 95) or "With Windows XP, 2000, or Windows NT 4.0" on page 65 (Windows XP, 2000, or Windows NT 4.0).*

- ❏ *This section describes how to access the shared printer on a standard network system using the server (Microsoft workgroup). If you cannot access the shared printer due to the network system, ask the administrator of the network for assistance.*

- ❏ *This section describes how to install the printer driver by accessing the shared printer from the Printers folder. You can also access the shared printer from Network Neighborhood or My Network on the Windows desktop.*

- ❏ *When you want to use the EPSON Status Monitor 3 at clients, you have to install both of the printer driver and the EPSON Status Monitor 3 in each client from the CD-ROM.*

With Windows Me, 98, or 95

Follow these steps to set Windows Me, 98, or 95 clients.

1. Click Start, point to Settings, and click Printers.

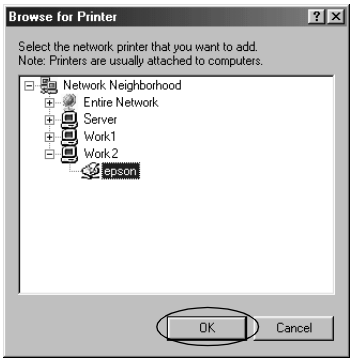
2. Double-click the Add Printer icon, then click Next.

3. Select Network printer, then click Next.

4. Click Browse, and the Browse for Printer dialog box appears.

 Note:
 You can also type "\\(the name of the computer that is locally connected to the shared printer)\(the shared printer's name)" in the Network path or queue name.

5. Click the computer or server that is connected to the shared printer, and the name of the shared printer. Then click OK.



Note:
The name of the shared printer may be changed by the computer or server that is connected to the shared printer. To make sure of the name of the shared printer, ask the administrator of the network.

6. Click Next.

Note:
- ❏ *If the printer driver is installed in the client beforehand, you need to select the new printer driver or the current printer driver. When the prompt to select the printer driver appears, select the printer driver according to the message.*
- ❏ *If the printer server's OS is Windows Me, 98, or 95, go to the next step.*
- ❏ *If the printer server's OS is not Windows Me, 98, or 95, go to "Installing the printer driver from the CD-ROM" on page 75.*

7. Make sure of the name of the shared printer, and select whether to use the printer as the default printer or not. Click OK, and then follow the on-screen instructions.

Note:
You can change the shared printer's name so that it appears only on the client computer.

With Windows XP or 2000

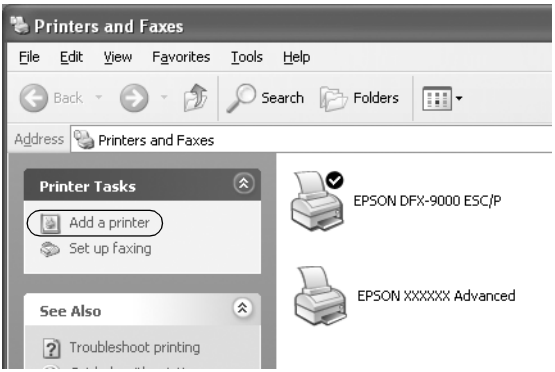
Follow these steps to set Windows XP or 2000 clients.

You can install the printer driver of the shared printer, if you have Power Users or more powerful access rights even if you are not the Administrator.

1. For Windows 2000 clients, click Start, point to Settings, and click Printers.
 For Windows XP Professional clients, click Start, and click Printers and Faxes.
 For Windows XP Home Edition clients, click Start, click Control panel, then click Printers and Faxes.

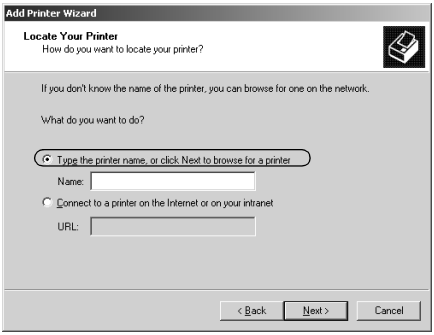
2. For Windows 2000, double-click the Add Printer icon, then click Next.

 For Windows XP, click the Add a printer in the Printer Tasks menu.



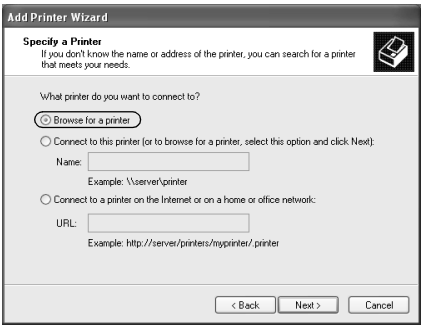
3. Select Network printer (for Windows 2000) or A network printer, or a printer attached to another computer (for Windows XP), then click Next.

4. For Windows 2000, select Type the printer name, or click Next to browse for a printer, then click Next.

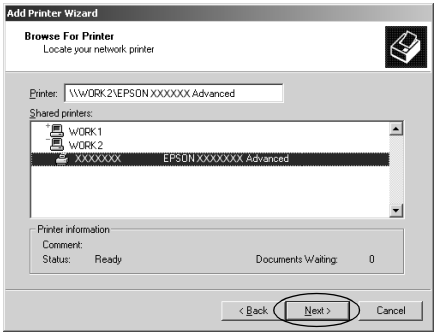


Note:
You can also type the shared printer's name or network path in the Name box, such as "\\(the name of the computer that is locally connected to the shared printer)\(the shared printer's name)."

For Windows XP, select Browse for a printer, then click Next.



5. Click the icon of the computer or server that is connected to the shared printer, and the name of the shared printer. Then click Next.



Note:

- ❏ *The name of the shared printer may be changed by the computer or server that is connected to the shared printer. To make sure of the name of the shared printer, ask the administrator of the network.*

- ❏ *If the printer driver is installed in the client beforehand, you need to select either the new printer driver or the current printer driver. When the prompt to select the printer driver appears, select the printer driver according to the message.*

- ❏ *If the printer server's OS is Windows XP or 2000, go to the next step.*

- ❏ *If the printer server's OS is not Windows XP or 2000, go to "Installing the printer driver from the CD-ROM" on page 75.*

6. For Windows 2000, select whether to use the printer as the default printer or not, then click OK.

 For Windows XP, if another driver is already installed, select whether to use the printer as the default printer or not, then click OK.

7. Make sure of the settings, then click Finish.



With Windows NT 4.0

Follow these steps to set Windows NT 4.0 clients.

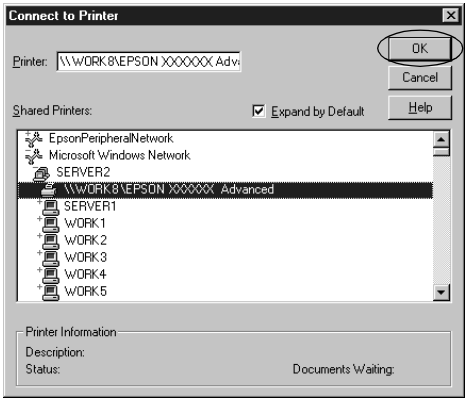
You can install the printer driver of the shared printer, if you have Power Users or more powerful access rights even if you are not the Administrator.

1. Click Start, point to Settings, and click Printers.

2. Double-click the Add Printer icon.

3. Select Network printer server, then click Next.

4. Click the icon of the computer or server that is connected to the shared printer and the name of the shared printer. Then click OK.



Note:

- ❏ *You can also type "\\(the name of the computer that is locally connected to the shared printer)\(the shared printer's name)" in Network path or queue name.*

- ❏ *The name of the shared printer may be changed by the computer or server that is connected to the shared printer. To make sure of the name of the shared printer, ask the administrator of the network.*

- ❏ *If the printer driver is installed in the client beforehand, you need to select the new printer driver or the current printer driver. When the prompt to select the printer driver appears, select the printer driver according to the message.*

- ❏ *If the printer server's OS is Windows NT 4.0, go to the next step.*

- ❏ *If the printer server's OS is not Windows NT 4.0, go to "Installing the printer driver from the CD-ROM" on page 75.*

5. Select whether to use the printer as the default printer or not, then click OK.

6. Click Finish.

Installing the printer driver from the CD-ROM

This section describes how to install the printer driver in the clients when the computers of the server and clients use different OS.

The on-screen displays on the following pages may differ depending on the version of Windows OS.

Note:

- ❏ *When installing in Windows XP, 2000, or Windows NT 4.0 clients, you must access Windows XP, 2000, or Windows NT 4.0 with the Administrator.*

- ❏ *If the computers of the server and clients use the same OS, you do not have to install the printer drivers from the CD-ROM.*

1. Access the shared printer and a prompt may appear. Click OK, and then follow the on-screen instructions to install the printer driver from the CD-ROM.

2. Insert the CD-ROM, then the EPSON Installation Program dialog box appears. Cancel the dialog box by clicking Cancel, then type the appropriate drive and folder names in which the printer driver for clients is located, then click OK.



When installing drivers in Windows XP or 2000, "Digital Signature is not found." may appear. Click Yes (for Windows 2000) or Continue Anyway (for Windows XP) and continue installing.

The folder name differs depending on the OS being used.

Client's OS	Folder Name
Windows 95	\<Language>\WIN95
Windows 98	\<Language>\WIN98
Windows Me	\<Language>\WINME
Windows XP, 2000	\<Language>\WIN2000
Windows NT 4.0	\<Language>\WINNT40

3. Select the name of the printer, then click OK. Then follow the on-screen instructions.

Note:
If you also want to install EPSON Status Monitor 3, see "Installing EPSON Status Monitor 3" on page 61 for instructions.

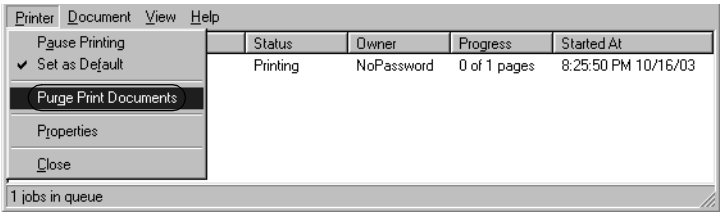
Canceling Printing

If the printouts are not what you expected and display incorrect or garbled characters or images, you may need to cancel printing. When the printer icon is displayed on the taskbar, follow the instructions below to cancel printing.

1. Double-click the printer icon on the task bar, then click Purge Print Documents on the Printer menu.



2. When canceling all printing documents, select Purge Print Documents (For Windows Me or 98) or Cancel All Documents (For Windows XP, 2000, or Windows NT 4.0) on the Printer menu.
 When canceling a specified document, select a document you want to cancel and select Cancel Printing (For Windows Me or 98) or Cancel (For Windows XP, 2000, or Windows NT 4.0) on the Document menu.



 The printing job is canceled.

Uninstalling the Printer Software

When you wish to reinstall or upgrade the printer driver, uninstall the printer driver that has been installed already.

Uninstalling the printer driver and EPSON Status Monitor 3

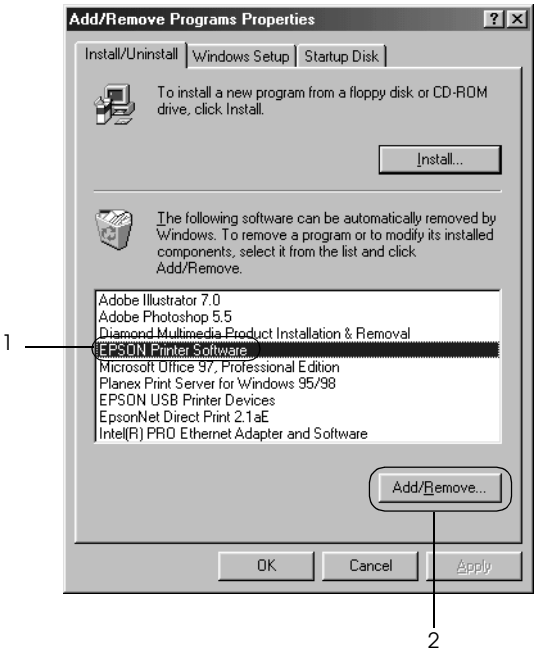
1. Quit all applications.

2. Click Start, point to Settings, and click Control Panel.

3. Double-click the Add/Remove Programs icon.

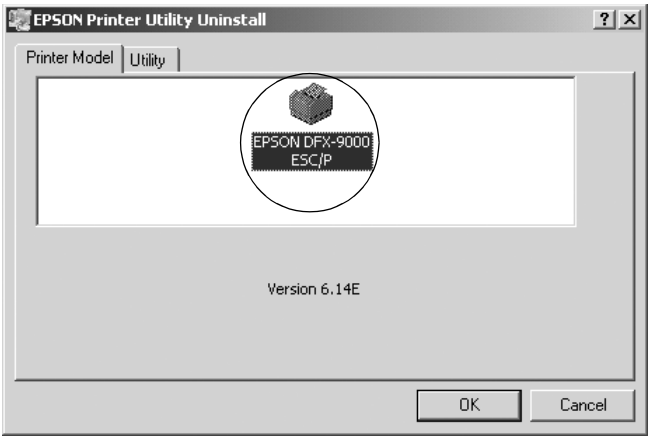


4. Select EPSON Printer Software, and click the Add/Remove.



Note:
When using the Windows XP or Windows 2000 computer, click Change *or* Remove Programs, *select the* EPSON Printer Software, *then click* Change/Remove.

5. Click the Printer Model tab, select the EPSON DFX-9000 ESC/P icon, then click OK.



6. If you uninstall Monitored Printers, click Yes in the displayed dialog box.

 Note:
 You can uninstall only the Monitored Printers utility of EPSON Status Monitor 3. When the utility is uninstalled, you cannot change the setting of Monitored Printers from EPSON Status Monitor 3.

7. If you uninstall EPSON Status Monitor 3, click Yes in the displayed dialog box.

8. Follow the on-screen instructions.

Uninstalling the USB device driver

When you connect the printer to your computer with a USB interface cable, the USB device driver is also installed. When you uninstalled the printer driver, you also need to uninstall the USB device driver.

Follow these steps to uninstall the USB device driver.

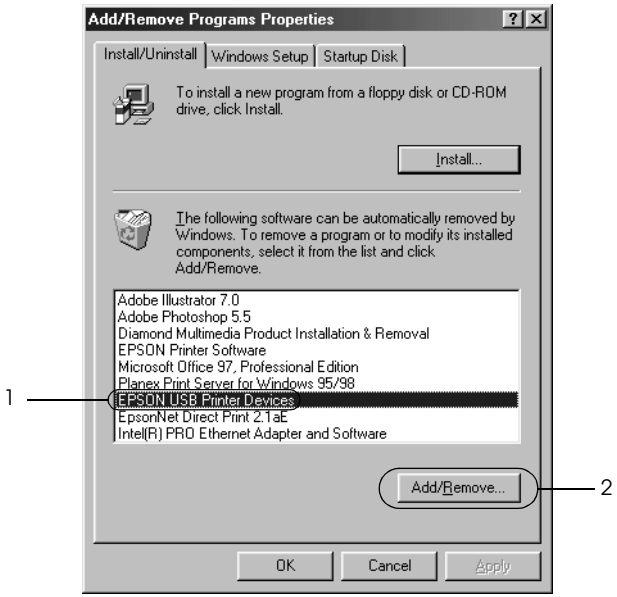
Note:

❏ *Uninstall the printer driver before uninstalling the USB device driver.*

❏ *Once you uninstalled the USB device driver, you cannot access any other Epson printers connected with a USB interface cable.*

1. Follow steps 1 through 3 of "Uninstalling the Printer Software" on page 77.

2. Select EPSON USB Printer Devices, and click Add/Remove.



Note:

❏ *EPSON USB Printer Devices appears only when the printer is connected to Windows Me or 98 with a USB interface cable.*

❏ *If the USB device driver is not installed correctly, EPSON USB Printer Devices may not appear. Follow these steps to run the "Epusbun.exe" file in the CD-ROM.*

1. Insert the CD-ROM in your computer's CD-ROM drive.
2. Access the CD-ROM drive.
3. Double-click the \<Language>\WIN98 *or* \<Language>\WINME *folder.*
4. Double-click the Epusbun.exe *icon.*

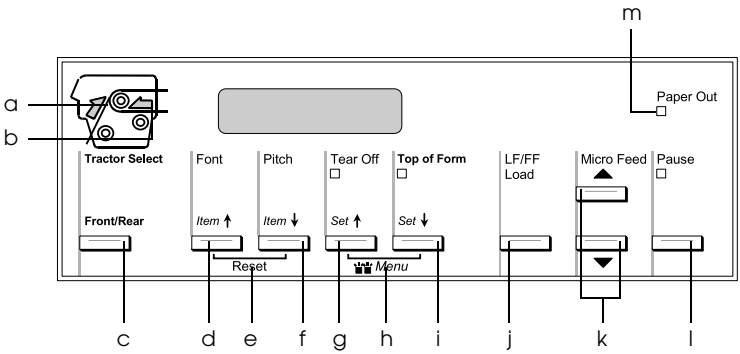
3. Follow the on-screen instructions.

See the *Start Here* to reinstall a printer driver.

Chapter 4

Control Panel

Buttons and Lights



a Tractor Select Front indicator

On when the front tractor is selected. The light is green when paper is loaded, and red when the tractor is out of paper.

b Tractor Select Rear indicator

On when the rear tractor is selected. The light is green when paper is loaded, and red when the tractor is out of paper.

c Front/Rear button

Selects the front or rear tractor. If you have been using paper loaded on one tractor, first remove the printed output before pressing this button to switch the tractor.

d Font (Item↑) button

- ❏ Selects one of the fonts. To select a font, see "Selecting a Font and Pitch" on page 86.
- ❏ When the printer enters the SelecType mode and default-setting mode, the button works as an Item↑ button. You can press the Item↑ button to select the previous menu. See "Changing the printer's settings" on page 98 for details.

e Reset

When you press both the Font and Pitch buttons simultaneously, the printer clears buffer and returns to its default settings.

f Pitch (Item↓) button

- ❏ Selects one of the pitch settings. To select a pitch, see "Selecting a Font and Pitch" on page 86.
- ❏ When the printer enters the SelecType mode and default-setting mode, the button works as an Item↓ button. You can press the Item↓ button to select the next menu. See "Changing the printer's settings" on page 98 for details.

g Tear Off (Set⬆) button

❏ Feeds continuous paper forward to the tear-off position.

❏ When the printer enters the SelecType mode and default setting mode, the button works as the Set⬆ button. You can press the Set⬆ button to select the previous value of a setting item. See "Changing the printer's settings" on page 98 for details.

Tear Off light

On when the paper is in the tear-off position.

h Menu

When you press the Tear Off and Top of Form buttons at the same time, the printer enters or exits the SelecType mode and you can set the various printer settings. See "Changing the settings in the SelecType mode" on page 98 for details.

i Top of Form (Set⬇) button

- ❏ Enters the top-of-form position mode and sets the new top-of-form position after it has been adjusted with the Micro Feed buttons.
- ❏ When the printer enters the SelecType mode and default setting mode, the button works as the Set⬇ button. You can press the Set⬇ button to select the next value of a setting item. See "Changing the printer's settings" on page 98 for details.

Top of Form light

On when the printer is in the top-of-form and tear-off modes.

j LF/FF Load button

- ❏ Loads continuous paper when the printer is out of paper.
- ❏ Feeds paper line by line when pressed briefly.
- ❏ Advances continuous paper to the next top-of-form position when held down for a few seconds.

k Micro Feed buttons

Adjust the paper position, such as the top-of-form position and tear-off position.

l Pause button

Stops printing temporarily, and resumes printing when pressed again.

Pause light

- ❏ On when the printer is paused.
- ❏ Flashes when the print head overheats.

m Paper Out light

- ❏ On when the printer is out of paper.
- ❏ Flashes when paper jams or the printer fails to eject paper.

Selecting a Font and Pitch

You can select one each of the printer's fonts and pitches by using the buttons on the printer's control panel, as described below.

Note:

- ❏ *Settings you make in application programs usually override settings you make from the printer's control panel. For best results, use your application to select a font and make other settings.*
- ❏ *The available pitch depends on the font you select. See the table below for more information.*

Font	Pitch
HSD	10, 12, 15, 17, 20
Draft	10, 12, 15, 17, 20, PS

Font	Pitch
Roman	10, 12, 15, 17, 20, PS
Sans Serif	10, 12, 15, 17, 20, PS

1. Make sure that the printer is not printing.

2. Press the Font button. The first available font is displayed on the LCD. Press the Font button until the font that you want to use is displayed. The LCD goes back to the original state in a few seconds and the font you selected is set.

3. Press the Pitch button. The first available font is displayed on the LCD. Press the Pitch button until the pitch that you want to use is displayed. The LCD goes back to the original state in a few seconds and the pitch you selected is set.

About Your Printer's Settings

You can make many settings that control printer functions with the printer's control panel. While you can often set these functions through your software or printer driver, you may sometimes need to change a setting from the control panel by using the SelecType mode and default-setting mode.

For a detailed description of the settings you can change in the SelecType mode and default-setting mode, see "Understanding the printer's settings" on page 87. For instructions on changing the settings, see "Changing the printer's settings" on page 98.

Understanding the printer's settings

This section describes the settings and options available in the SelecType mode and default-setting mode.

SelecType mode

The settings that are available in the SelecType mode are shown in the following table and explained in detail after the table.

Menu	Values (default in bold)
Language	**English**, French, German, Italian, Spanish, Portuguese
Print settings*1	Execute
Page length for rear tractor	3 inches, 3.5 inches, 4 inches, 5.5 inches, 6 inches, 7 inches, 8 inches, 8.5 inches, 11 inches, 70/6 inches, **12 inches**, 14 inches, 17 inches
Page length for front tractor	3 inches, 3.5 inches, 4 inches, 5.5 inches, 6 inches, 7 inches, 8 inches, 8.5 inches, 11 inches, 70/6 inches, **12 inches**, 14 inches, 17 inches
Skip over perforation	**Off**, On
Line spacing	**1/6 inches**, 1/8 inches
Left margin	**0 columns** to 80 columns
Right margin	1 columns to **136 columns**
Platen gap	**Auto**, 0 to 14
Auto tear off	**Off**, On
Auto line feed	**Off**, On
Print direction	**Bi-D**, Uni-D
Software	**ESC/P**, IBM PPDS
0 slash	**Off**, On
I/F (Interface) mode	**Auto**, Parallel, Serial, USB, Optional
Auto I/F (Interface) wait time	**10 seconds**, 30 seconds
Parallel I/F bi-directional mode	Off, **On**
Packet mode	**Auto**, Off

Menu	Values (default in bold)
Serial baud rate	**19200 BPS**, 9600 BPS, 4800 BPS, 2400 BPS, 1200 BPS, 600 BPS, 300 BPS
Serial parity	**None**, Odd, Even, Ignore
Serial data length	**8-bit**, 7-bit
Character table	Standard version: **PC437**, PC850, PC860, PC863, PC865, PC861, BRASCII, Abicomp, Roman8, ISO Latin 1, PC858, ISO 8859-15, Italic U.S.A., Italic France, Italic Germany, Italic U.K., Italic Denmark 1, Italic Sweden, Italic Italy, Italic Spain 1
	NLSP version: **PC437**, PC850, PC860, PC863, PC865, PC861, BRASCII, Abicomp, Roman8, ISO Latin 1, PC858, ISO 8859-15, PC437 Greek, PC853, PC855, PC852, PC857, PC866, PC869, MAZOWIA, Code MJK, ISO 8859-7, ISO Latin 1T, Bulgaria, PC774, Estonia, ISO 8859-2, PC866 LAT., PC866 UKR, PC APTEC, PC708, PC720, PCAR864, PC771, PC437 Slovenia, PC MC, PC1250, PC1251, Italic U.S.A., Italic France, Italic Germany, Italic U.K., Italic Denmark 1, Italic Sweden, Italic Italy, Italic Spain 1
Auto CR (IBM PPDS)*2	**Off**, On
IBM character table (IBM PPDS)*2	**Table 2**, Table 1
Buzzer	Off, **On**
Low-noise mode	**Off**, On
Auto cut mode*3	**Off**, On
Auto cut/back mode*3	**Off**, On
Overlapping multipart forms	**Off**, On
Continuous forms with labels	**Off**, On
Skip over binding	**Off**, On
Get IP address*4	Panel, Auto, PING

Menu	Values (default in bold)
IP address*5	000.000.000.000 to 255.255.255.255
Subnet mask*4	000.000.000.000 to 255.255.255.255
Default gateway*4	000.000.000.000 to 255.255.255.255
Save settings?*6	Yes, No

*1 After this is displayed, press the Set⬇ (Top of Form) button to print all current settings.

*2 This setting is available only in IBM PPDS emulation mode.

*3 This setting is available only when the optional perforation cutter (#C81570X) is installed.

*4 These settings are available only when the optional Print Server is installed.

*5 This setting is available only when the optional Print Server is installed and the `Get IP address` setting is set to `Panel` or `PING`.

*6 This menu appears by pressing the Menu (Tear Off and Top of Form) buttons in the SelecType mode.

Page length for rear tractor

This setting allows you to set the page length (in inches) for the continuous paper loaded on the rear push tractor.

Page length for front tractor

This setting allows you to set the page length (in inches) for the continuous paper loaded on the front push tractor.

Skip over perforation

When you turn on this feature, the printer provides a one-inch (25.4 mm) margin between the last line printed on one page and the first line printed on the next page. Because most application program margin settings override margin settings from the control panel, you should use this setting only if you cannot set your top and bottom margins using your application.

Line spacing

You can select `1/6 inches` or `1/8 inches` for line spacing.

Left margin

This setting allows you to set the margin (in columns) from the left edge. The margin is set in columns of 10 cpi, regardless of the pitch that is set.

Right margin

This setting allows you to set the margin (in columns) from the right edge. The margin is set in columns of 10 cpi, regardless of the pitch that is set.

Platen gap

This setting allows you to set the paper thickness. When you select `Auto`, the printer automatically adjusts to the thickness of the paper loaded. If you want to set it manually, select `0` to `14`. When using overlapping multi-part forms, select `0` to `14` according to the paper thickness you use.

Auto tear off

When auto tear off is on and you are using continuous paper with the front or rear push tractor, the printer automatically advances the paper perforation to the tear-off position, where you can easily tear off the printed page(s). When the printer receives data again, it automatically moves the paper back to the top-of-form position and starts printing, so you can use all of the next page.

When auto tear off is off and you are using continuous paper with the front or rear push tractor, you need to move the perforation to the tear-off position manually by pressing the Tear Off and Micro Feed buttons. See "Tearing Off the Printed Pages" on page 31 for more information.

Auto line feed

When auto line feed is on, the printer accompanies each carriage return (CR) code received with a line feed (LF) code.

Print direction

You can select bidirectional printing (Bi-D) or unidirectional printing (Uni-D). Printing is normally bidirectional; however, unidirectional printing allows for precise vertical printing alignment.

Software

When you select ESC/P, the printer operates in the EPSON ESC/P mode. When you select IBM PPDS, the printer emulates an IBM printer.

0 slash

The zero character has a slash (∅) when this feature is on; it has no slash (0) when this feature is off. The slash allows you to easily distinguish between the uppercase letter "O" and a zero.

I/F (Interface) mode

The printer provides a slot for an optional interface in addition to its built-in parallel interface, serial interface, and USB interface. You can choose Auto (automatic), Parallel, Serial, USB, or Optional for the interface mode. When you select Auto, the printer automatically selects the interface that is receiving data, and uses that interface until the end of the print job. The Auto setting allows you to share the printer among multiple computers without changing the interface mode.

If only one computer is connected to the printer, you can select Parallel, Serial, USB, or Optional, depending on which interface your computer uses.

Auto I/F (Interface) wait time

When the printer is in the auto interface mode and it receives no data from the currently selected interface for the amount of time specified with this setting, it determines which interface is receiving data and switches to that interface. You can specify either `10 seconds` or `30 seconds` for the auto interface wait time.

Parallel I/F bi-directional mode

The Parallel Interface bidirectional transfer mode is used when this feature is on. If bidirectional transfer mode is unnecessary, turn this off.

Packet mode

Make sure to select `Auto` when you print from Windows applications using the printer driver included in the Printer Software CD-ROM that comes with the printer. Turn this feature off if you have connection troubles while printing from applications based on other operating systems such as DOS.

Serial baud rate

This setting is available only when data is transferred via a serial interface. Use this option to set the data transfer rate (baud) for the serial interface. The baud rate is measured in bits per second (bps). See your computer manual and software documentation for the proper setting.

Serial parity

This setting is available only when data is transferred via a serial interface. The parity bit is added to data and detects errors on the data. When this option is set to `None`, the parity bit is not added to data. When this option is set to `Ignore`, the parity is added to data, but the printer receives the data even if an error is detected.

Serial data length

This setting is available only when data is transferred via a serial interface. Set the data length of the serial interface to `8-bit` or `7-bit`. See your computer manual and software documentation for the proper setting.

Character table

You can select among various character tables including several international character sets for the italic character table. This setting is used when you print without using the printer driver.

When using the printer driver, change the settings on the printer driver. For details, see "Printer Driver Settings Overview" on page 54.

Auto CR (IBM PPDS)

This setting is available only in IBM PPDS emulation mode. When auto carriage return is on, each line feed (LF) code or ESC J code is accompanied by a carriage return (CR) code so the printer moves the next printing position to the left margin. When this setting is off, you must send a CR code after the line feed code to move the printing position to the left margin.

IBM character table (IBM PPDS)

This setting is available only in IBM PPDS emulation mode. You can select `Table 2` or `Table 1` for the IBM character table.

Buzzer

The printer beeps when an error occurs. See "Using the error indicators" on page 105 for more information on printer errors. If you do not want the printer to beep when an error occurs, turn off this setting.

Low-noise mode

When this mode is set to On, the noise is reduced, but the printing speed is slower.

Auto cut mode

This function is available only when the optional perforation cutter (#C81570X) is installed in the printer. When this setting is set to On, the perforation cutter cuts each page at the perforation automatically. Note the following when you turn on this functions:

- ❏ Make sure the paper is at least 4 inches long.
- ❏ Do not change the top of form position using the Top of Form button.
- ❏ Do not feed the paper using the Micro Feed buttons.
- ❏ Never cut labels, continuous paper with labels, and overlapping multi-part forms.
- ❏ If you set the cutting method through the printer driver's paper source setting, it overrides Auto cut mode.

Auto cut/back mode

This function is available only when the optional perforation cutter (#C81570X) is installed in the printer. When you turn on this feature, the printer automatically cuts each page at the perforation and feeds the paper to the top-of-form position while it is printing.

Overlapping multipart forms

When this setting is set to On, you can print on overlapping multi-part forms that vary in thickness.

Continuous forms with labels

When this setting is set to `On`, you can print on continuous forms with labels. You can set the label position in the default-settings mode. See "Adjusting the label position" on page 30 for details.

Skip over binding

When this setting is set to `On`, the print head avoids the binding area along the right and left edges of multi-part forms during paper feeding. This makes paper feeding easier and prevents paper jams.

Get IP address

This setting is available only when the optional Print Server is installed. You can select the method of getting the IP address. Select `Panel` to get the IP address from the control panel. See "Setting the IP address from the control panel" on page 161 for details. For information on the settings when this feature is set to `Auto` or `Ping`, see a manual for the Print Server that you use.

IP address

This setting is available only when the optional Print Server is installed and the `Get IP address` setting is set to `Panel` or `Ping`. You can set the printer's IP address with this setting.

Subnet mask

This setting is available only when the optional Print Server is installed. You can set the printer's subnet mask with this setting.

Default gateway

This setting is available only when the optional Print Server is installed. You can set the printer's default gateway with this setting.

Save settings?

This menu appears by pressing the Menu (Tear Off and Top of Form) buttons in the SelecType mode. When you select `Yes`, the current settings in the SelecType mode are saved.

default-setting mode

You can make settings for continuous forms with labels and the panel lock out mode in the default setting mode. These settings are shown in the following tables.

Continuous forms with labels

The following settings are available only when the `Continuous forms with label` setting is set to `On` in the SelecType mode.

Menu	Values (default in bold)
Label base position	**Paper left edge**, First dot
Label top position	**0** to 4752/216 (by 1/216 inches)
Label length	**0** to 4752/216 (by 1/216 inches)
Label left position	**0** to 1440/120 (by 1/120 inch)
Label width	**0** to 1440/120 (by 1/120 inch)
Base sheet PG position number	**0** to 14
Label paper PG position number	**0** to 14

Menu	Values (default in bold)
Pause function	**Unlock**, Lock
Micro Feed function	Unlock, **Lock**
Load function	**Unlock**, Lock
LF function	Unlock, **Lock**
FF function	Unlock, **Lock**
Top of Form function	Unlock, **Lock**
Tear Off function	**Unlock**, Lock
Font function	Unlock, **Lock**
Pitch function	Unlock, **Lock**
Front/Rear function	Unlock, **Lock**
Menu function	Unlock, **Lock**
Reset function	Unlock, **Lock**

If a setting is set to Unlock, you can use the button, regardless of the panel lock out mode. If a setting is set to Lock, you cannot use the button when the printer is in the panel lock out mode.

Changing the printer's settings

Changing the settings in the SelecType mode

The following table shows the basic function of each button in the SelecType mode.

Button	Basic function
Menu (Tear Off and Top of Form) buttons	Enters or exits the SelecType mode.
Item↑ (Font) button	Selects the previous menu parameter.

Button	Basic function
Item⬇ (Pitch) button	Selects the next menu parameter.
Set⬆ (Tear Off) button	Select the previous value in the selected menu.
Set⬇ (Top of Form) button	Select the next value in the selected menu.

Follow these steps to enter the SelecType mode and change the settings:

Note:
If you turn off the printer prior to exiting the SelecType mode, any changes you may have made are canceled and not saved.

1. Make sure paper is loaded.

2. Press the Menu (Tear Off and Top of Form) buttons to enter the SelecType mode.The LCD displays the selected language for this mode.

3. If the language you want is not selected, press the Set⬆ (Tear Off) or Set⬇ (Top of Form) button until the LCD displays the language you want.

4. Press the Item⬇ (Pitch) button to set the desired language.

 Note:
 The language you select is also used for other settings, modes, and test print outs, such as default-settings mode and printing a Hex Dump.

5. If you select `Print Settings`, press the Set⬇ (Top of Form) button to print the current settings.

6. Press the Item⬆ (Font) or Item⬇ (Pitch) button to select the menu parameters which you wish to change.

Note:
You can scroll the menu by holding the Item⬆ (Font) *or* Item⬇ (Pitch) *button for a few seconds.*

7. Press the Set⬆ (Tear Off) or Set⬇ (Top of Form) button to select the values within the selected parameter until you find the desired setting.

 Note:
 You can scroll the value by holding the Set⬆ (Tear Off) *or* Set⬇ (Top of Form) *button for a few seconds.*

8. After setting the selected parameter to the desired setting, you may either continue to make changes to other parameters by pressing the Item⬇ or Item⬆ button, or exit the SelecType mode.

 Note:
 The menu selection returns to the first menu after the selection of the last menu parameter is done.

9. When you finish making settings, press the Menu (Tear Off and Top of Form) buttons.

10. The LCD displays `Save Setting`. If you want to save the settings, select `Yes` by pressing the Set⬆ (Tear Off) button. If you do not want to save the settings, select `No` by pressing the Set⬇ (Top of Form) button.

 The printer exits the SelecType mode.

 Note:
 If you turn off the printer prior to exiting the SelecType mode, any changes you may have made are canceled and not saved.

Changing the settings in the default-setting mode

The following table shows the basic function of each button in the default-setting mode.

Button	Basic function
Item⬆ (Font) button	Selects the previous menu parameter.
Item⬇ (Pitch) button	Selects the next menu parameter.
Set⬆ (Tear Off) button	Select the previous value in the selected menu.
Set⬇ (Top of Form) button	Select the next value in the selected menu.

Follow these steps to enter the default-setting mode and change the settings:

Note:
If you turn off the printer prior to exiting the default-setting mode, settings that you have set up until you turn off the printer are saved.

1. Make sure paper is loaded and turn off the printer.

 Caution:
 Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise, you may damage the printer.

2. Turn on the printer while holding down the Font button to enter the default-setting mode. The message `Setting mode` appears on the LCD panel.

 Note:
 The instructions and current settings are printed out in the language that you set in the SelecType mode. If you want to change the language, change the language setting in the SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.

3. Select one of the three main menus by pressing the Set⬆ (Tear Off) or Set⬇ (Top of Form) button.

 Note:
 You can scroll value by holding the Set⬆ (Tear Off) *or* Set⬇ (Top of Form) *button for a few seconds.*

4. If you select `Print Settings`, press the Item⬇ (Pitch) button to print the current settings.

 If you select `Form w/labels` or `Panal lock out`, press the Item⬆ (Font) or Item⬇ (Pitch) button to select the setting items which you wish to change and go to the next step.

 Note:
 You can scroll the menu by holding the Item⬆ (Font) *or* Item⬇ (Pitch) *button for a few seconds.*

5. Press the Set⬆ (Tear Off) or Set⬇ (Top of Form) button to select the values within the selected parameter until you find the desired setting.

 Note:
 You can scroll value by holding the Set⬆ (Tear Off) *or* Set⬇ (Top of Form) *button for a few seconds.*

6. After setting the selected parameter to the desired setting, you may either continue to make changes to other parameters by pressing the Item⬇ button or the Item⬆ button, or exit the default-setting mode.

 Note:
 The menu selection returns to the first menu after the selection of the last menu parameter is done.

7. When you finish making settings, turn off the printer.

 The printer exits the default-setting mode and the settings are saved.

Lock-Out Mode

You can restrict the use of buttons on the control panel by using the lock-out mode. In the basic setting, you can only use the Pause, Load and Tear Off buttons, when the lock-out mode is on.

You can select which buttons are locked when the printer is in the lock out mode. See "Changing the settings in the default-setting mode" on page 101 for instructions on how to change the lock out mode setting.

Turning on or off the lock-out mode

You can turn on or off the lock-out mode easily by using buttons on the control panel.

Follow these steps to turn on the lock-out mode:

1. Make sure the printer is turned off.

 Caution:
 Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise, you may damage the printer.

2. Turn on the printer while holding down both the Font and Pitch buttons. The printer beeps twice, indicating that the lock-out mode has been turned on.

To turn off the lock-out mode, repeat steps 1 and 2. The printer beeps once, indicating that the lock-out mode has been turned off.

See "Changing the settings in the default-setting mode" on page 101 for instructions on how to change the functions to be locked.

Chapter 5

Problem Solver

Diagnosing the Problem

For problems that may be related to USB connections, see "Correcting USB Problems" on page 121 for details.

If your problem is not USB related, troubleshooting printer problems is best handled in two easy steps; first diagnose the problem, then apply likely solutions until the problem is fixed.

The information that you need to diagnose and solve most common problems is provided by the printer's control panel, EPSON Status Monitor 3, or by printing a self test or Hex Dump. Refer to the appropriate section below.

If you have a specific problem relating to print quality, a printout problem not related to print quality, or a paper feeding problem, or if the printer does not print at all, refer to the appropriate section in this chapter.

To solve a problem, you may need to cancel printing. For details, see "Canceling Printing" on page 76.

Using the error indicators

You can identify many common printer problems using the lights on the control panel and messages on the LCD panel. If your printer stops working and one or more control panel lights are on or flashing and a message appears on the LCD panel, or the printer beeps, use the following table to diagnose and fix the problem. If you cannot fix your printer problem using this table, see "Problems and Solutions" on page 109.

State of panel lights and message on the LCD	**Beep pattern**	**Problem** **Solution**
Error: Paper out ● Paper Out ● Pause	●●●	No paper is loaded on the selected tractor. Load paper in the printer or select a different tractor by pressing the Front/Rear button.
	●●●	The paper is not loaded correctly. Remove your paper and reload it correctly.
Error: No paper loaded ● Paper Out ● Pause	●●●	Continuous paper is not fed to the standby position. Tear off the printed page at the perforation; then press the LF/FF Load button. The printer feeds the paper to the standby position.
Error: Paper jam ☼ Paper Out ● Pause	●●●	Paper is jammed in the printer. To clear the paper jam, see "Clearing Paper Jams" on page 125.
Error: Switching not completed ● Pause	●●●	The printer fails to change the paper. Cut the paper at the top of it and press the Pause or Front/Rear button.
Error: Ribbon jam ● Pause	●●●	Ribbon has jammed. Remove and re-install the ribbon cartridge. See "Replacing the Ribbon Cartridge" on page 130 for instructions.

State of panel lights and message on the LCD	Beep pattern	Problem Solution
Error: Ribbon out ● Pause	●●●	Ribbon is not installed. Install the ribbon cartridge and press the Pause button. See "Replacing the Ribbon Cartridge" on page 130 for instructions.
Error: Cover open ● Pause	●●●	The printer top cover is open. Close the cover.
Print head hot Please wait Ö Pause	—	The print head is overheated. Wait for a few minutes; the printer resumes printing automatically once the print head cools.
Error: xx Turn off printer Ö Paper Out Ö Pause Ö Tear Off/Set⬆ Ö Top of Form/Set⬇ Ö Front Ö Rear	●●●●●	An unknown printer error has occurred. Turn off the printer and leave it off for several minutes; then turn on the printer again. If the error recurs, contact your dealer.

● = on, Ö = flashing

●●● = short series of beeps (three beeps), ●●●●● = long series of beeps (five beeps)

Note:
The printer beeps once if you press a control panel button when the corresponding function is not available.

EPSON Status Monitor 3

EPSON Status Monitor 3 provides status messages and a graphic display showing the current status of the printer.

If a problem occurs while printing, an error message appears in the Progress Meter window.

Printing a Self Test

Running the printer's self test helps you determine whether the printer or the computer is causing the problem:

- ❏ If the self test results are satisfactory, the printer is working properly and the problem probably results from your printer driver settings, application settings, computer, or interface cable. (Be sure to use a shielded interface cable.)

- ❏ If the self test does not print properly, there is a problem with the printer. See "Problems and Solutions" on page 109 for possible causes and solutions to the problem.

Follow these steps to perform a self test:

1. Make sure that the printer is turned off and that the paper is set on the front or rear tractor.

 Caution:
 Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.

2. To run the test using the Draft font, turn on the printer while holding down the LF/FF Load button. To run the test using the printer's NLQ font, hold down the Top of Form button while you turn on the printer. Either self test can help you determine the source of your printing problem; however, the draft self test prints faster than the NLQ test.

 After a few seconds, the printer loads the paper automatically and begins printing the self test. A series of characters is printed.

Note:
To temporarily stop the self test, press the Pause *button. To resume the test, press the* Pause *button again.*

3. To end the self test, press the Pause button to stop printing. Tear off the page if necessary, and then turn off the printer.



Caution:
Do not turn off the printer while it is printing the self test. Always press the Pause *button to stop printing and then turn off the printer.*

Printing Hex Dump

If you are an experienced user or a programmer, you can print a hexadecimal dump to isolate communication problems between the printer and your software program. In hex dump mode, the printer prints all data it receives from the computer as hexadecimal values.

Note:
The Hex Dump feature is designed for use with DOS-based PC.

Follow these steps to print a hex dump:

1. Make sure paper is loaded and the printer is turned off.



Caution:
Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.

2. To enter hex dump mode, turn on the printer while holding down the Top of Form and LF/FF Load buttons.

3. Open a software program and send a print job to the printer. Your printer prints all the codes it receives in hexadecimal format.

```
1B 40 20 54 68 69 73 20 69 73 20 61 6E 20 65 78  .@ This is an ex
61 6D 70 6C 65 20 6F 66 20 61 20 68 65 78 20 64  ample of a hex d
75 6D 70 20 70 72 69 6E 74 6F 75 74 2E 0D 0A     ump printout...
```

By comparing the characters printed in the right column with the printout of the hexadecimal codes, you can check the codes the printer is receiving. If characters are printable, they appear in the right column as ASCII characters. Nonprintable codes, such as control codes, are represented by dots.

4. To turn off hex dump mode, press the Pause button, and then turn off the printer.

Caution:
Do not turn off the printer while it is printing the hex dump. Always press the Pause *button to stop printing and then turn off the printer.*

Problems and Solutions

Most problems you may encounter while operating your printer have simple solutions. Use the information in this section to find the source of and solution to printer problems that occur.

"Power supply problems" on page 110

"Paper loading or feeding problems" on page 111

"Printing position problems" on page 113

"Printing or printout quality problems" on page 115

"Network problems" on page 121

You can also use the self test to determine whether the printer or the computer is causing the problem. See "Printing a Self Test" on page 107 for instructions on printing a self test. To pinpoint communication problems, experienced users may want to use the printer's hex dump mode described in "Printing Hex Dump" on page 108.

To clear a paper jam, see "Clearing Paper Jams" on page 125.

Power supply problems

The control panel lights come on briefly, but then go off and stay off.

Cause	What to do
The printer's voltage rating does not match the voltage of your electrical outlet.	Check the printer and the outlet voltage ratings. If the voltages do not match, unplug the printer immediately and contact your dealer.

Warning:
Do not reconnect the power cord to an electrical outlet that has the wrong voltage for your printer.

The printer does not work and the control panel lights are off even when you turn on the printer.

Cause	What to do
The power cord is not properly plugged into the electrical outlet or your printer.	Turn off the printer, and make sure the power cord is firmly plugged into the electrical outlet and the printer, if necessary. Then turn on the printer.

The electrical outlet does not work.	Use a different outlet.

Paper loading or feeding problems

The printer does not load continuous paper or does not feed it properly.

Cause	What to do
Continuous paper is not loaded properly.	See "Loading Paper onto the Front Tractor" on page 13 or "Loading Paper onto the Rear Tractor" on page 20 for instructions on loading continuous paper with the tractor you want to use.
The wrong tractor may be selected.	Check if the correct tractor arrow is lit on the Tractor Select indicator. If the wrong tractor is selected, be sure paper is loaded to the standby position on the tractor you want to use. Then press the Front/Rear button to switch to that tractor.
The printer may be out of paper.	Load paper onto the tractor. The tractor arrow on the Tractor Select indicator should be green.

The printer does not feed continuous paper to the standby position.

Cause	What to do

You have not torn off the printed pages before pressing the LF/FF Load button.	Tear off the printed pages at the perforation. Then press the LF/FF Load button to feed the paper backward to the standby position.

When you switch between front and rear tractors, the paper jams or the printer does not feed the paper back to the standby position.

Cause	What to do
The printer may have reverse fed too many pages.	Use the tear off feature to tear off the printed document or any excess paper so that the printer needs to reverse feed only one page. Then press the Front/Rear button to switch tractors.
You may be trying to switch tractors when labels are loaded in the printer.	Labels jam when they are fed backward, so always remove any labels loaded in the printer before you switch tractors. To remove labels loaded in the printer, tear off the fresh supply below the tractor and press the LF/FF Load button to eject the remaining labels.

When you switch between front and rear tractors, the printer does not load paper onto the selected tractor.

Cause	What to do
The printer may be out of paper.	Load paper onto the tractor. The tractor arrow on the Tractor Select indicator should be green.

Printing position problems

Wrong top-of-form position

Your printing appears too high or low on the page.	
Cause	**What to do**
The paper size setting in your application software or printer driver does not match the size of the paper you are using.	Check the paper size setting in your application or printer driver.
The printer's page length settings for the front or rear tractor do not match the size of the continuous paper you are using.	Check the page length settings for the front or rear tractor using the printer's SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.
The top margin or top-of-form position setting is incorrect.	Check and adjust the margin or top-of-form position settings in your application software. See the printable area specifications in "Printable area" on page 181. You can also adjust the top-of-form position using the buttons on the control panel. However, settings made in Windows applications override settings made with the control panel. See "Adjusting the top-of-form position" on page 27 for details.
The printer driver settings you want to use are not selected in your software.	Choose the correct printer driver setting from the Windows desktop or in your application before printing.

Wrong tear-off position

The printer prints on (or too far away from) the perforation of your continuous paper.

Cause	What to do
The tear-off position setting is incorrect.	Adjust the tear-off position using the buttons on the control panel. See "Adjusting the top-of-form position" on page 27 for details.
The printer you want to use is not selected in your software.	Choose the correct printer from the Windows desktop or in your application before printing.
The paper size setting in your application or printer driver does not match the size of the paper you are using.	Check the paper size setting in your application or printer driver.
The printer's page length settings for the front or rear tractor do not match the size of the paper you are using.	Check the page length settings for the front or rear tractor using the printer's SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.

Printing or printout quality problems

The printer is on but it doesn't print.	
Cause	**What to do**
The interface cable is broken or twisted.	Check that the interface cable is not broken or twisted. If you have another interface cable, replace the cable and check whether the printer works correctly.
The printer is not connected directly to your computer.	When you use a printer changer, printer buffer, or a extension cable, the printer does not print correctly due to the combination of these devices. Make sure that the printer works correctly when it is connected to your computer without these devices.
The printer driver is not installed correctly.	Check that the printer driver is installed properly. If necessary, reinstall the printer driver.
Paper is jammed or the ribbon or guard mechanism is stuck.	Turn the printer off, open the printer cover and remove the jammed paper or things that are stuck.
The USB setting is incorrect.	Confirm the USB setting is correct. See "Correcting USB Problems" on page 121 for details.
The printer is hung-up (stopping in abnormal situations).	Turn the printer off and wait for a while. Then, turn the printer on again, and start printing.

The printer does not print when the computer sends data.

Cause	What to do
The printer is paused.	Press the Pause button to turn off the Pause light.
The interface cable is not plugged in securely.	Check that both ends of the cable between the printer and the computer are plugged in securely. If the cable is connected correctly, run a self test as described in "Printing a Self Test" on page 107.
Your interface cable does not meet the printer and/or computer specifications.	Use an interface cable that meets the requirements of both the printer and computer. See "Electronic" on page 168 and your computer documentation.
Your software is not properly set up for your printer.	Select your printer from the Windows desktop or in your application. If necessary, install or reinstall the printer driver software as illustrated in the *Start Here*.

The printer makes noise, but nothing prints or printing stops abruptly.

Cause	What to do
The ribbon has too much slack, the ribbon has come loose, or the ribbon cartridge is not installed properly.	Remove any slack in the ribbon by turning the ribbon-tightening knob, or reinstall the ribbon cartridge as described in the section under "Replacing the Ribbon Cartridge" on page 130.

The printout is pale.	
Cause	**What to do**
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the Ribbon Cartridge" on page 130.

The printout is faint.	
Cause	**What to do**
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the Ribbon Cartridge" on page 130.

Part of the printout is missing, or dots are missing in random positions.	
Cause	**What to do**
The ribbon has too much slack, the ribbon has come loose, or the ribbon cartridge is not installed properly.	Remove any slack in the ribbon by turning the ribbon-tightening knob, or reinstall the ribbon cartridge as described in "Replacing the Ribbon Cartridge" on page 130.
The ribbon is worn out.	Replace the ribbon cartridge as described in "Replacing the Ribbon Cartridge" on page 130.

Lines of dots are missing in the printout.	
Cause	**What to do**
The print head is damaged.	Stop printing and contact your dealer to have the print head replaced.

Caution:
Never replace the print head yourself; you may damage the printer. Also, other parts of the printer must be checked when the print head is replaced.

All the text is printed on the same line.

Cause	What to do
No line feed command is sent at the end of each line of text.	Turn on the auto line feed setting using the printer's default-setting mode so that the printer automatically adds a line feed code to each carriage return. See "Changing the settings in the SelecType mode" on page 98 for details.

The printout has extra blank lines between lines of text.

Cause	What to do
Two line feed commands are being sent at the end of each line of text, because the printer's auto line feed setting is on.	Turn off the auto line feed setting using the printer's SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.
The line space setting in your application software is incorrect.	Adjust the line space setting in your application software.

The printer prints strange symbols, incorrect fonts, or other inappropriate characters.

Cause	What to do
Your printer and computer are not communicating correctly.	Make sure that you use the correct interface cable and that the communications protocol is correct. See "Electronic" on page 168 and your computer documentation.

The wrong character table is selected in your software.	Select the correct character table using your software or the SelecType mode. The character table setting in your software overrides settings made in the SelecType mode.
The printer you want to use is not selected in your software	Choose the correct printer from the Windows desktop or in your application before printing.
Your application software is not configured correctly for your printer.	Make sure that your application software is configured correctly for your printer. See your application documentation. If necessary, install or reinstall the printer driver software as illustrated in the *Start Here*.
Software settings override settings you make using the default-setting mode or the control panel buttons.	Use your application software to select the font.

Vertical printed lines are not aligned.

Cause	What to do
Bidirectional printing, which is the printer's standard printing mode, is out of alignment.	Use the printer's bidirectional adjustment mode to correct this problem. See "Aligning Vertical Lines in Your Printout" on page 126.

Option using problems

The perforation cutter is installed and the printer does not feed continuous paper properly.

Cause	What to do
The perforation cutter's connector is not plugged securely into the printer.	Turn off the printer then check the perforation cutter connector.

The perforation cutter is installed and the paper is not cut properly.

Cause	What to do
The printer driver setting is not set correctly.	Select the paper source you want to use in the printer driver.
You didn't set the Auto cut mode.	Set the Auto cut mode to On. However, any setting made in the driver overrides the auto cut mode setting.
You don't set the page length to match your paper.	Set the Page length for Rear tractor or Page length for Front tractor to match your paper.

Paper jams, does not feed smoothly.

Cause	What to do
The perforation cutter is not correctly installed.	Remove the perforation cutter and then reinstall it, making sure the mounting notches and pins fit together properly. See "Installing the pull tractor" on page 135 for instructions.

Network problems

Cannot configure the network interface or cannot print from the network.	
Cause	**What to do**
The printer settings or network settings may be wrong.	First, check to see if you can print a status sheet, as described in the manual for the Print Server that you are using. If you can print a status sheet, check the network settings; otherwise, set the interface mode of the printer's control panel to Auto. Check whether or not print jobs from other computers are being printed through the network. When the print job is executed, the printer or your computer may have a problem. Check the connection between the printer and your computer, settings on the printer driver, and settings of your computer. When the print job is not executed, network settings may be incorrect. Ask your network administrator for help.

Correcting USB Problems

If you are having difficulty using your printer with a USB connection, read the information in this section.

Make sure that your computer is a Windows XP, Me, 98, or 2000 pre-installed model

Your computer must be a Windows XP, Me, 98, or 2000 pre-installed model. You may not be able to install or run the USB printer driver on a computer which is not equipped with a USB port or which has been upgraded from Windows 95 to Windows XP, Me, 98, or 2000.

For details about your computer, contact your dealer.

Make sure that EPSON USB Printer Devices appears on the Device Manager menu (for Windows Me and 98 only)

If you canceled the plug-and-play driver installation before the procedure was complete, either the USB printer device driver or the printer driver may be incorrectly installed.

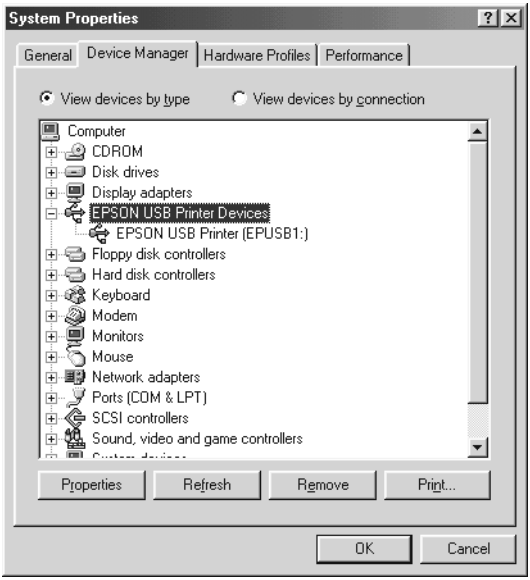
Follow these steps to check the installation and reinstall the drivers:

1. Turn the printer on, and plug the USB cable into the printer and the computer.

2. Right-click the My Computer icon on your desktop, then click Properties.

3. Click the Device Manager tab.

If your drivers are correctly installed, EPSON USB Printer Devices should appear on the Device Manager menu.



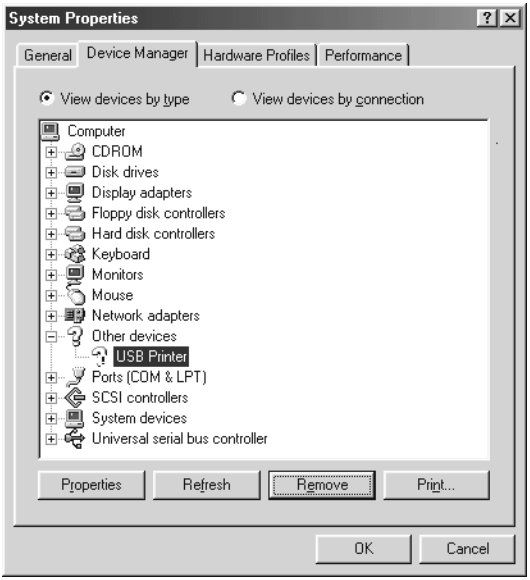
If EPSON USB Printer Devices does not appear on the Device Manager menu, click the plus (+) sign beside Other devices to view the installed devices.



If USB Printer appears under Other devices, the USB printer device driver is not installed correctly. If EPSON DFX-9000 appears, the printer driver is not installed correctly.

If USB Printer, or EPSON DFX-9000 does not appear under Other devices, click Refresh or unplug the USB cable from the printer, then plug it into the printer again.

4. Under Other devices, select USB Printer or EPSON DFX-9000 and click Remove. Then, click OK.



5. When the following dialog box appears, click OK. Then click OK again to close the System Properties dialog box.



6. Turn off the printer and restart your computer. Then, reinstall the drivers from the beginning, following the instructions in the *Start Here*.

Printer does not work correctly with the USB cable

If your printer does not work correctly with the USB cable, try one or more of these solutions:

- ❏ Make sure that the cable you are using is a standard, shielded USB cable.

- ❏ If you are using a USB hub, connect the printer to the first tier of the hub, or connect the printer directly to the computer's USB port.

- ❏ For Windows Me or 98, try reinstalling the USB printer device driver and the printer software. First, uninstall EPSON Printer Software using the Add/Remove Programs utility in the Control Panel, then uninstall EPSON USB Printer Devices. Next, reinstall the software as illustrated in the *Start Here*. If EPSON USB Printer Devices is not registered in the Add/Remove Programs list, access the CD-ROM and double-click epusbun.exe in \<Language>\WINME or \<Language>\WIN98 folder. Then follow the on-screen instructions.

Clearing Paper Jams

Follow these steps to clear a paper jam:

1. Turn off the printer. The printer is off when the power switch is pressed down to the ○ side.

2. Open the front cover or top cover depending on the tractor you are using.

3. Tear off the fresh supply at the perforation.

4. Gently pull the paper out of the printer. Remove any remaining pieces of paper.

5. Close the printer cover and turn on the printer. Make sure the Paper Out light is not flashing and the Pause light is off.

Aligning Vertical Lines in Your Printout

If you notice that the vertical lines in your printout are not properly aligned, you can use the printer's bidirectional adjustment mode to correct this problem.

During bidirectional adjustment, the printer prints three sheets of alignment patterns, labeled High Speed Draft, Draft, and NLQ (near letter quality). As described below, you select the best alignment pattern from each sheet.

Note:
The setting instructions are printed in the language that you set in the SelecType mode. If you want to change the language of the setting instructions, change the language setting in the SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for instructions.

Follow these steps to perform the bidirectional adjustment:

1. Make sure paper is loaded, then turn off the printer.

 Caution:
 Whenever you turn off the printer, wait at least five seconds before turning it back on; otherwise you may damage the printer.

2. While holding down the Pause button, turn on the printer. The printer enters the bidirectional adjustment mode and then prints instructions and the first set of alignment patterns.

3. As described in the instructions, compare the alignment patterns and select the aligned pattern number with the best alignment by pressing the Font (Item↑) or Pitch (Item↓) button. The LCD shows the pattern number that is selected at the time. Press the Set↓ (Top of Form) button to fix the selected pattern number, and the next set of alignment patterns is printed.

4. Select the pattern with the best alignment for each of the remaining sets of alignment patterns.

5. After you select the best pattern in the final set of alignment patterns and save your selection by pressing the Set↓ (Top of Form) button, turn off the printer and exit the bidirectional adjustment mode.

Canceling Printing

If you encounter problems while printing, you may need to cancel printing.

You can cancel printing from your computer by using the printer driver, or from the printer's control panel.

Using the printer driver

To cancel a print job before it is sent from your computer, see "Canceling Printing" on page 76.

Using the printer's control panel

Pressing the Font (Item↑) and Pitch (Item↓) buttons at the same time stops printing, clears the print job being received from the active interface, and clears errors that may have occurred at the interface.

Note:
This operation also returns the printer's settings to defaults. When you do not want to change settings to defaults, cancel printing by using the printer driver.

Contacting Customer Support

If your Epson product is not operating properly and you cannot solve the problem using the troubleshooting information in your product documentation, contact customer support services for assistance. Check your Pan-European Warranty Document for information on how to contact EPSON Customer support. They will be able to help you much more quickly if you give them the following information:

- ❏ Product serial number
 (The serial number label is usually on the back of the product.)
- ❏ Product model
- ❏ Product software version
 (Click About, Version Info, or similar button in the product software.)
- ❏ Brand and model of your computer
- ❏ Your computer operating system name and version
- ❏ Names and versions of the software applications you normally use with your product

Technical Support Web Site

Go to http://www.epson.com and select the Support section of your local EPSON web site for the latest drivers, FAQs, manuals and other downloadables.

Epson's Technical Support Web Site provides help with problems that cannot be solved using the troubleshooting information in your printer documentation.

Chapter 6

Options and Consumables

Ribbon Cartridge

Genuine Epson ribbon cartridge

When printing becomes faint, you need to replace the ribbon cartridge. Genuine Epson ribbon cartridges are designed and manufactured to work properly with your Epson printer. They ensure proper operation and long life of the print head and other printer parts.

Your printer uses the following ribbon cartridge:

Epson black ribbon cartridge: S015384

Replacing the Ribbon Cartridge

When printing becomes too faint, you need to replace the ribbon. Use the S015384 Epson replacement cartridge only.

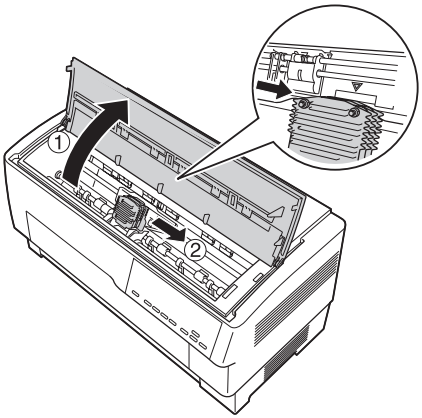


Warning:
If the printer has been used recently, the print head may be hot. Let it cool before attempting to replace the ribbon.

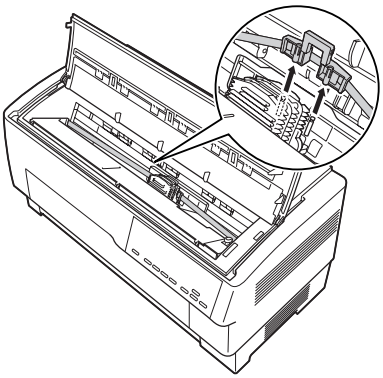
To replace the ribbon cartridge, follow these steps:

1. Press the Pause button. Then turn off the printer.

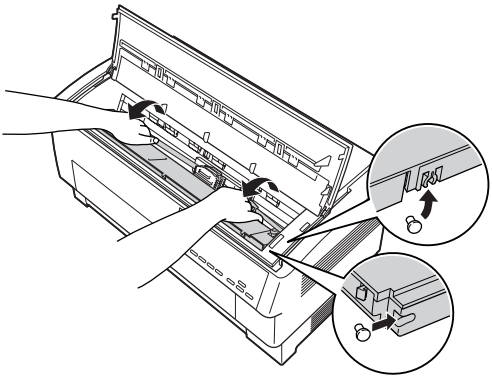
2. Open the upper cover and slide the print head to the ▽ mark.



3. Lift the ribbon guide off the print head as shown below.

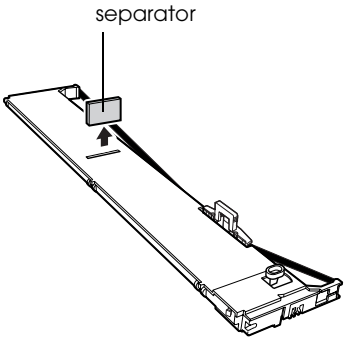


4. Pull up on the side of the ribbon cartridge as shown below to release it from the printer's mounting pins. Remove the cartridge by lifting it up and away from you.

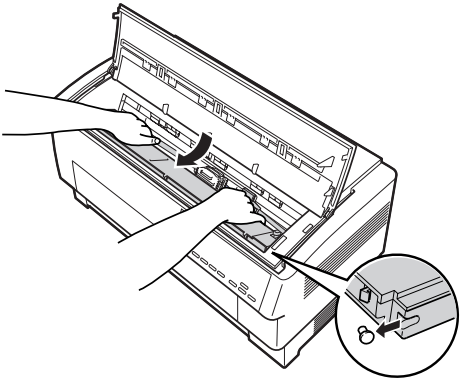


Caution:
Make sure you don't pull on the flat white cable beneath the ribbon cartridge.

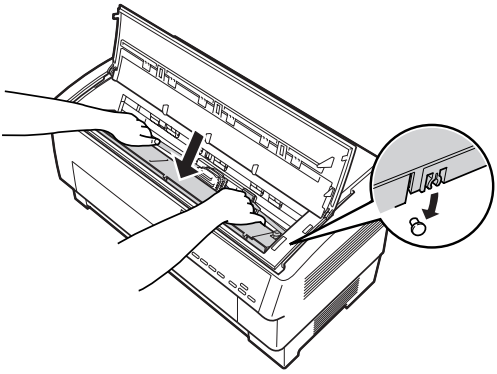
5. Remove the separator from the middle of the ribbon cartridge and discard it.



6. Hold the ribbon cartridge with both hands and lower it into the printer as shown below. Pulling the cartridge toward you, slide the notches nearest you over the two corresponding pins in the printer.

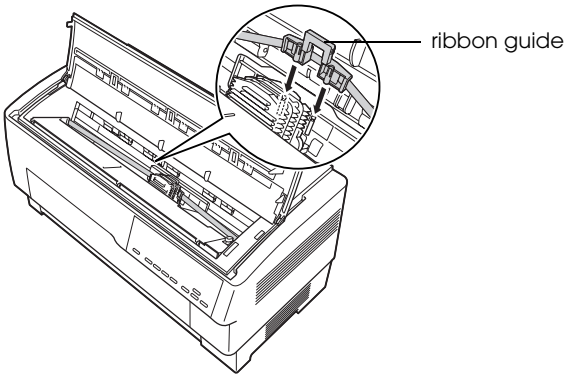


7. Push the cartridge down into position until the other two slots snap into place over the mounting pins in the printer.

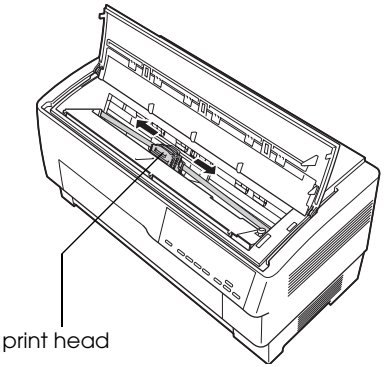


8. Press lightly on both sides of the cartridge to make sure it is locked in place.

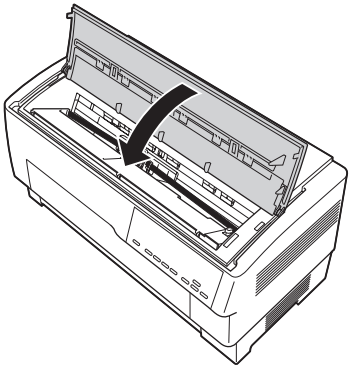
9. Insert the ribbon guide over the metal pins on each side of the print head as shown below. The smaller end of the guide should be on top, with its angled edge facing back toward the platen. Turn the ribbon-tightening knob again to remove any slack in the ribbon.



10. Slide the print head from side to side to see that it moves smoothly and that the ribbon is not twisted or creased.



11. Close the top cover.



Using the Pull Tractor

The optional pull tractor (C800382) provides optimum continuous paper handling. The pull tractor is especially useful with continuous multi-part forms and labels. For best results, use the pull tractor with either the printer's front or rear built-in tractor, as described in this section.

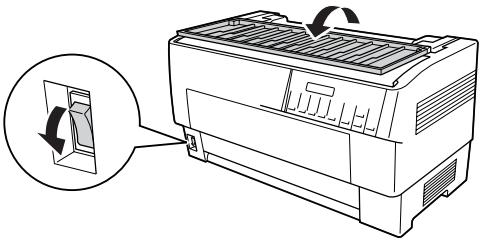
Note:
When the pull tractor is installed, the tear-off feature is not available.

Installing the pull tractor

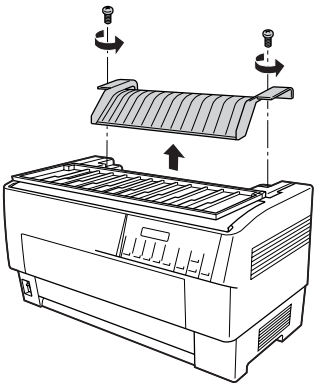
To install the pull tractor, you need a cross-head screwdriver.

Note:
If you are going to be using the pull tractor with the built-in rear tractor, you should load paper onto the rear tractor before installing the pull tractor. See "Loading Paper onto the Rear Tractor" on page 20 for instructions.

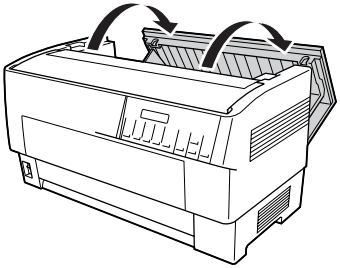
1. Turn off the printer and open the paper separator cover.



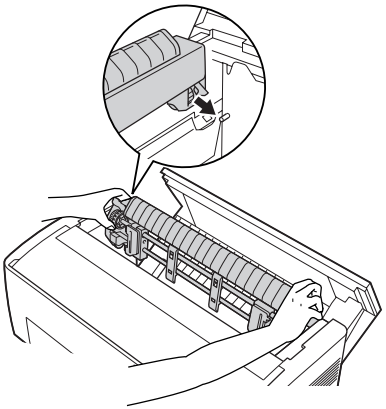
2. Use a cross-head screwdriver to remove the two screws securing the paper separator to the printer. Then lift the paper separator off the printer.



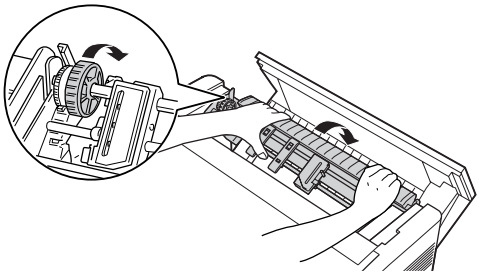
3. Close the paper separator cover and open the printer's top cover.



4. Holding the pull tractor with its gears to the left, fit the tractor's front notches over the mounting shaft of the printer.



5. Then tilt the pull tractor back until its rear latches click into place over the printer's rear mounting pins.



6. Close the printer's top cover.

Using the pull tractor with the front tractor

If you are using labels or multi-part forms with more than seven parts (including the original), you should use the pull tractor with the printer's built-in front tractor.

You can switch between the front and rear tractors at any time when you are using the pull tractor. Just press the Front/Rear button and then use the LF/FF Load button to feed the paper the additional distance to the pull tractor. (Labels require special handling. See "Using labels" on page 42 for details.)

To tear off documents, press the LF/FF Load button to advance the paper to a point where it can be torn off.

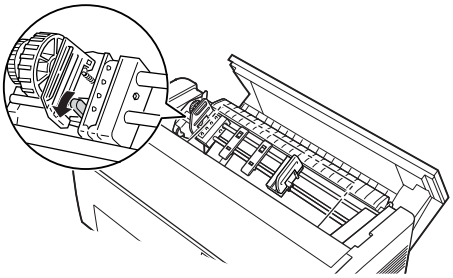
To use the pull tractor with the front tractor, follow these steps:

1. Turn on the printer and open the top cover.

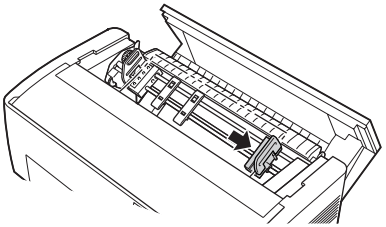
2. Make sure paper is loaded on the front tractor to the top-of-form position. If paper is already loaded on the tractor but it is in the standby position, press the Front/Rear or LF/FF Load button (depending on which tractor is selected) to load the paper to the top-of-form position. (If no paper is loaded on the front tractor, load paper. See "Loading Paper onto the Front Tractor" on page 13 for instructions.)

3. Once you have paper loaded on the printer's front tractor, use the LF/FF Load button to advance the paper to the pull tractor.

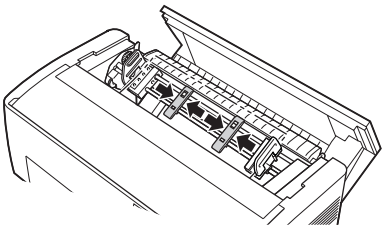
4. Release both sprocket lock levers on the pull tractor by pulling them toward you. Then open both sprocket covers.



5. Adjust the sprockets to match the width of your paper.

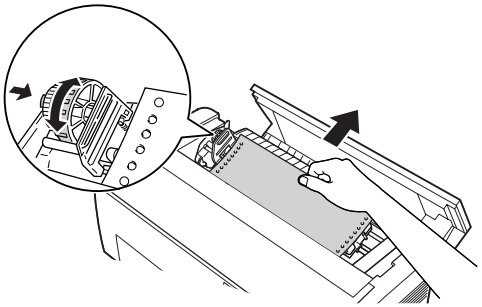


6. Slide the two paper supports so they are spaced evenly between the two sprockets.



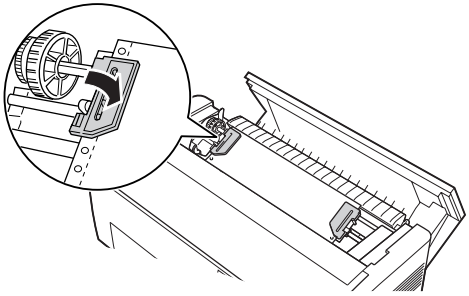
Note:
When you use the paper with less than four inches wide, remove the paper supports.

7. Fit the sprocket holes of the paper over the sprocket pins. If there is slack in the paper or if the holes in the paper do not align properly with the sprocket pins, pull the paper slightly and use the pull tractor knob to adjust the position of the paper as shown below. Slide the knob to the right first, and then turn it as necessary.

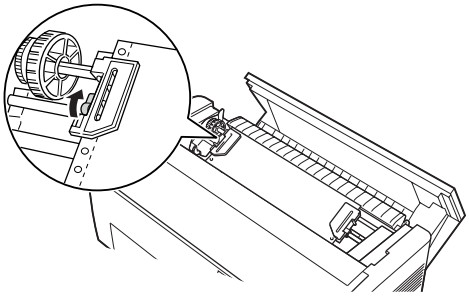


Caution:
Be sure the sprockets on the built-in front tractor and the optional pull tractor are aligned.

8. Close the sprocket covers.



9. Adjust the two sprockets until the paper is straight and smooth, and then lock the sprockets into place.



Caution:
Be sure the sprockets are not too far apart. Your paper could jam if they pull the paper too tightly or tear the edges of the paper holes. To remove any excess tension in your paper, release the right sprocket and lock it again.

10. Adjust the top-of-form position, if necessary. See "Adjusting the top-of-form position" on page 27 for instructions.

11. Close the top cover. Press the LF/FF Load button to feed the paper out the back of the printer. Make sure the edge of the first sheet emerges below the paper separator.

Using the pull tractor with the rear tractor

If you are using labels or multi-part forms with more than seven sheets (including the original), do not use the rear tractor; use the front tractor. See "Using the pull tractor with the front tractor" on page 138 for details.

You can switch between the front and rear tractors at any time when you are using the pull tractor. Just press the Front/Rear button and then use the LF/FF Load button to feed the paper the additional distance to the pull tractor.

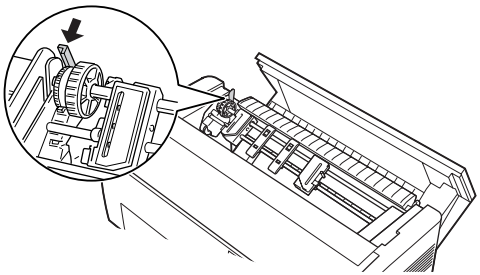
To tear off printed pages, press the LF/FF Load button to advance the paper to a point where it can be torn off.

The following steps explain how to load paper using the optional pull tractor (already installed) with the printer's built-in rear tractor. If you have not yet installed the pull tractor, load paper onto the rear tractor and then install the pull tractor. See "Installing the pull tractor" on page 135 for instructions.

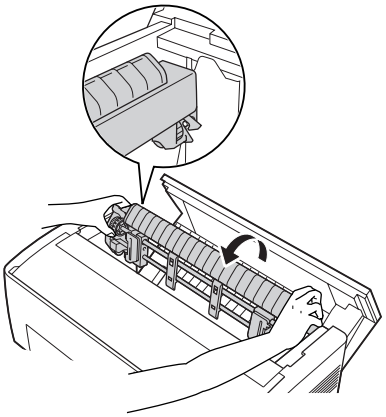
1. Turn off the printer, then open the top cover.

 Note:
 If paper is loaded on the rear tractor, in either the top-of-form or standby position, skip to Step 6.

2. Pull the levers on the pull tractor toward you to release the pull tractor.

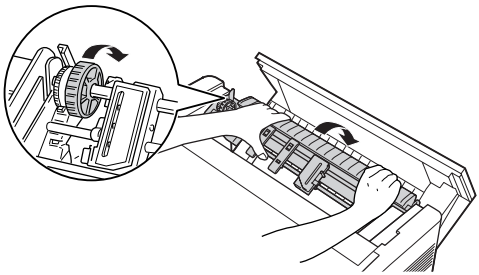


3. Tilt the tractor forward so that its pins rest on the metal frame of the printer.



4. Load paper onto the rear tractor by following step3 through 10 of "Loading Paper onto the Rear Tractor" on page 20.

5. Then tilt the pull tractor back until the rear latches click into place over the printer's rear mounting pins.



6. Turn on the printer, and use the LF/FF Load button to advance the paper to the pull tractor.

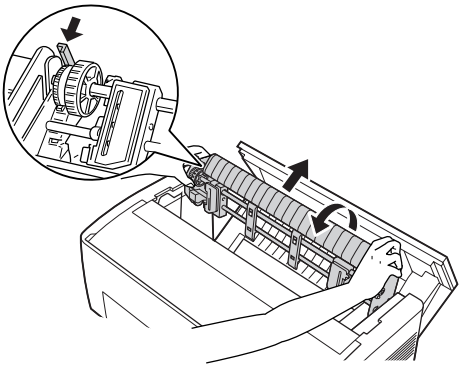
Now follow steps 4 through 11 of "Using the pull tractor with the front tractor" on page 138.

Removing the pull tractor

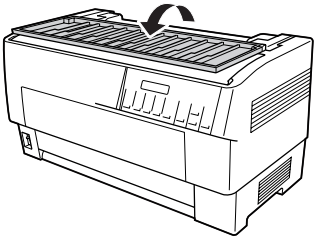
To remove the pull tractor you'll need a cross-head screwdriver and the paper separator that was originally installed on the printer.

1. Remove any paper installed on the tractor and turn off the printer.

2. Open the top cover and locate the levers that lock the pull tractor in place on the printer. Pull these levers forward to release the pull tractor. Then lift the tractor up and out of the printer.



3. Close the printer's top cover and open the paper separator cover.



4. Use a cross-head screwdriver to remove the two screws securing the paper separator to the printer. Then remove the paper separator that came with the pull tractor.

5. Using the two screws, reinstall the original paper separator and close the paper separator cover.

Using the Perforation Cutter

The optional perforation cutter (#C81507X) makes using continuous paper easier by cutting off the perforation of your printed documents for you. When you use the perforation cutter, be sure to set the page length to match your paper.

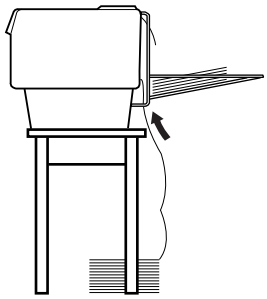
The perforation cutter comes with the perforated paper output attachment and the perforated paper output tray. See "Attaching the perforated paper output attachment and output tray" on page 149 to attach the perforated paper output attachment and the output tray.

Caution:

- ❏ *When the perforation cutter is installed, never cut labels, overlapping multi-part forms, or continuous forms with labels.*
- ❏ *Make sure that the paper thickness and perforation between pages are within the specified ranges. See the paper specifications in Appendix A.*
- ❏ *Make sure the paper is at least 4 inches long and 16 inches wide at the most.*
- ❏ *When using multi-part forms with the perforation cutter, make sure that you use multi-part forms with seven parts (one original and six copies) or less.*

If you plan to load continuous paper from the rear tractor, be sure to leave enough room around the printer for the attached perforated paper output attachment and the output tray, and for the stack of fresh paper. Make sure you align your paper supply with the paper loaded in the tractor so the paper feeds smoothly into the printer.

The following illustration shows a way to position your paper with the rear tractor loaded.

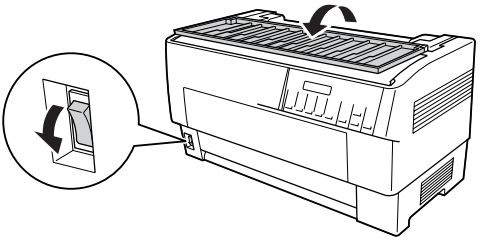


Installing the perforation cutter

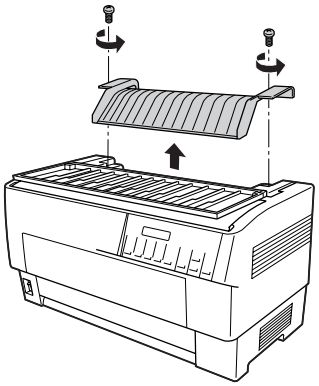
The steps below show you how to install the perforation cutter. You will need a cross-head screwdriver.

Note:
If you plan to use the perforation cutter with the built-in rear tractor, you need to load paper onto the rear tractor before you install the perforation cutter. See "Loading Paper onto the Rear Tractor" on page 20 for instructions.

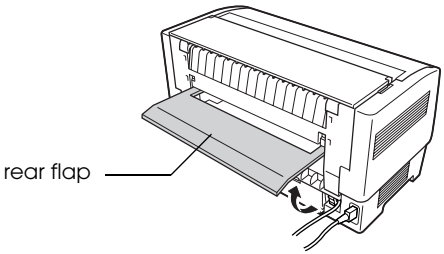
1. Turn off the printer and open the paper separator cover.



2. Use a cross-head screwdriver to remove the two screws securing the paper separator to the printer. Then lift off the paper separator. Store the paper separator and screws for later use.

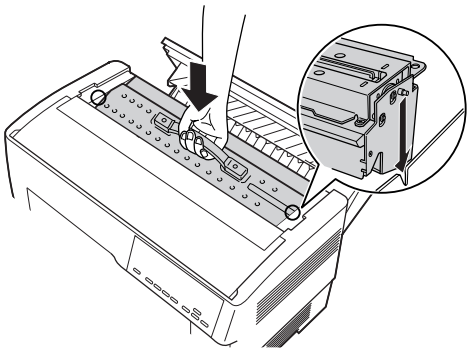


3. Close the paper separator cover. Then open the rear flap and lock it in place.



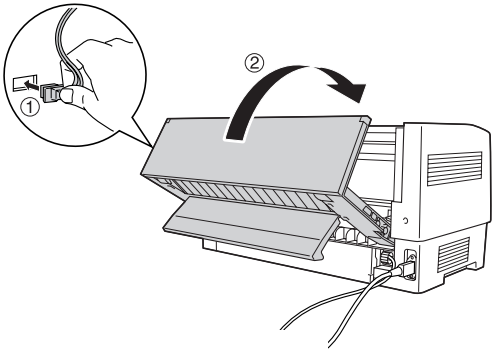
4. Open the top cover.

5. Hold the perforation cutter by its handle with the connector facing to the right. Then lower the perforation cutter into the space at the back of the printer, fitting the pins on the sides of the perforation cutter into the notches in the printer.

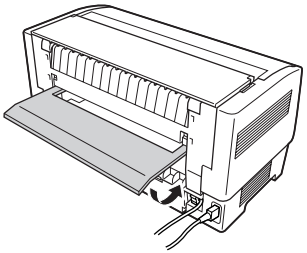


6. After the perforation cutter is in place, push back the perforation cutter handle flat.

7. Plug the perforation cutter's connector securely into the connector inside the printer. Then close the top cover.



8. Close the rear flap.



Attaching the perforated paper output attachment and output tray

The perforation cutter comes with the perforated paper output attachment and the perforated paper output tray for stacking printed sheets. You can stack up to 200 sheets of paper or 100 multi-part forms on the output tray.

Note:

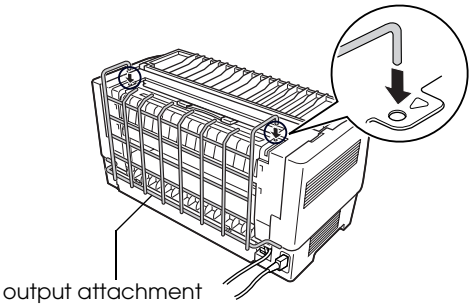
❏ *Stacked pages may be turned over on the output tray.*

❏ *Do not allow the printer to stack more than 200 sheets of paper or 100 multi-part forms on the output tray.*

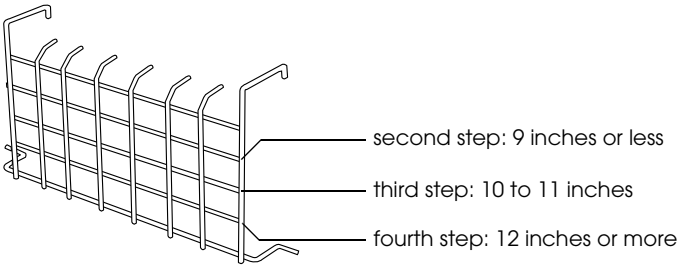
❏ *Remove the output tray when you will be printing hundreds of pages and will not need to cut the printed pages.*

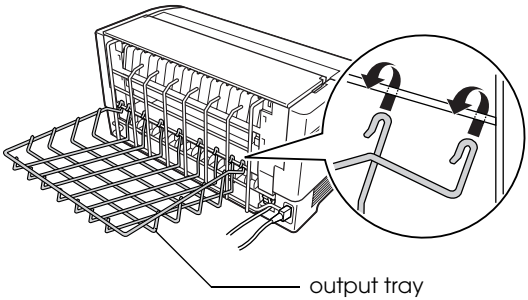
To attach the perforated paper output attachment and the output tray, follow these steps:

1. Open the paper separator cover and attach the output attachment as shown below.



2. Close the paper separator cover and position the output tray on the output attachment to accommodate the page length of paper you use:





You are now ready to use the perforation cutter as described in the next section.

Caution:

- ❏ *You cannot open the top cover while the perforated paper output attachment and the output tray is attached. If you want to open the top cover, you need to remove them first.*
- ❏ *When you are ready to reload the paper onto the rear tractor, first remove the perforation cutter. See "Removing the perforation cutter" on page 154 for instructions.*

Paper handling

This section describes how to use the perforation cutter with continuous paper. Before printing with the perforation cutter installed, set the page length to match your paper using your software or the SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.

Note:

- ❏ *EPSON recommends that the perforation between pages is folded when using the perforation cutter.*
- ❏ *The last page may not be ejected completely. If this happens, gently pull it out of the printer.*
- ❏ *The perforation cutter can not cut the last 11 inches of continuous paper, but you can print on it.*

Cutting off a printed document

You can cut off a printed document using one of the following methods:

- ❏ If you set the cutting method through the printer driver, the printer driver setting overrides the SelecType settings.

 You can select the following from the printer driver's paper source settings:

 Tractor Front: Do not cut
 Tractor Front: Cut last page only
 Tractor Front: Cut each page
 Tractor Rear: Do not cut
 Tractor Rear: Cut last page only
 Tractor Rear: Cut each page

- ❏ Set the Auto cut mode setting to On in the SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for instructions.

❏ Select the printer's tear-off mode as follows:

1. Make sure printing has finished. Open the paper separator cover. You see the perforation cutter's tear-off edge.

2. Press the Tear Off button to enter tear-off mode. The printer feeds the paper's perforation to the perforation cutter's tear-off edge.

3. If the paper is not aligned with the tear-off edge, adjust the tear-off position by pressing the Micro Feed buttons.

4. Press the Tear Off button again. The printer cuts off your printed document and feeds the fresh paper back to the top-of-form position.

Switching tractors

To switch tractors when the perforation cutter is installed, follow these steps:

1. Make sure the printer is turned on. If you are in the middle of printing a document, wait for the printer to finish printing before you switch tractors.

2. If no paper is loaded in the tractor you want to use, load paper. See "Loading Paper onto the Front Tractor" on page 13 or "Loading Paper onto the Rear Tractor" on page 20 for instructions.

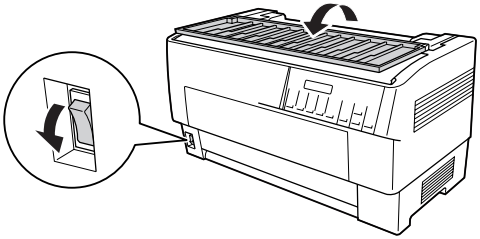
3. Press the Front/Rear button to switch to the other tractor. The printer cuts off the printed document, feeds the paper on the tractor backward to the standby position, and then advances the paper on the other tractor to the loading position.

Removing the perforation cutter

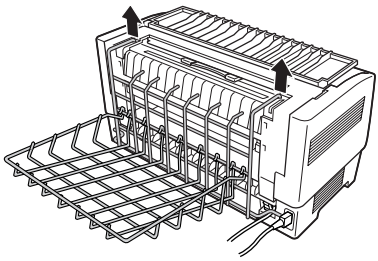
To remove the perforation cutter, follow the steps below. After you remove the perforation cutter, store it in its original box and packing materials.

1. Cut off any printed document in the printer as described in the previous section.

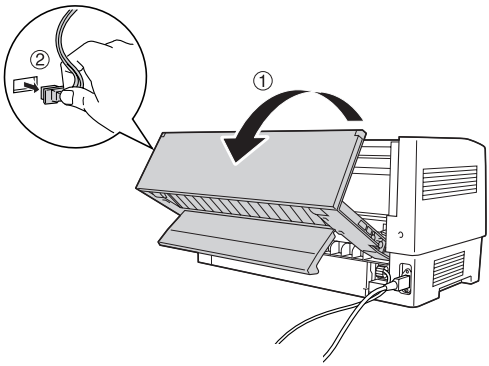
2. Turn off the printer and open the paper separator cover.



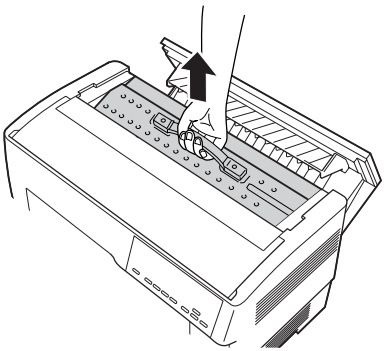
3. Remove the perforated paper output attachment and the output tray from the printer.



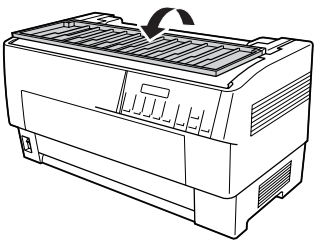
4. Open the top cover. Then unplug the paper cutter's connector from the printer.



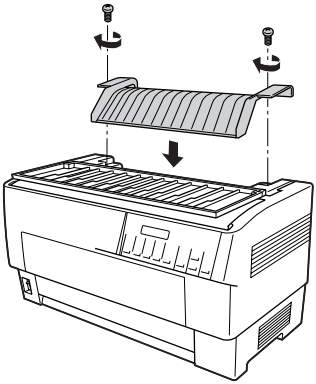
5. Grasp the handle on the perforation cutter and lift the perforation cutter up and out of the printer.



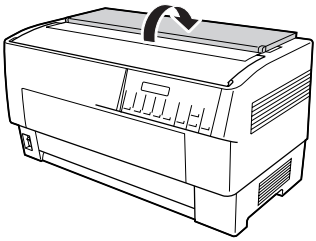
6. Close the top cover and open the paper separator cover.



7. Reattach the paper separator using the two screws that you removed before.



8. Close the paper separator cover.



Interface Cards

You can use optional interface cards to supplement your printer's built-in serial and parallel interfaces. The EPSON interface cards below are compatible with your printer. (Not all of these interfaces are available worldwide.)

Number	Name
C82305✻/C82306✻	Serial interface
C82307✻/C82308✻	32KB intelligent serial interface
C82312✻	LocalTalk interface
C82313✻	32KB IEEE-488 interface
C82314✻	Coax interface
C82315✻	Twinax interface
C82345✻	IEEE-1284 parallel interface
C82435✻	EpsonNet 10/100 Base Tx Int. Print Server 3

The asterisk (✻) is a substitute for the last digit, which varies by country.

If you are not sure whether you need an optional interface or would like to know more about interfaces, contact your EPSON dealer.

Note:
Your printer has an auto interface mode function that allows you to connect to more than one interface at a time. See "Changing the settings in the SelecType mode" on page 98 for details.

Coax and twinax interfaces enable the printer to communicate with an IBM minicomputer or mainframe via coax or twinax protocol. This allows EPSON printers to function as local IBM printers without the addition of any other circuitry or components.

Installing an interface card

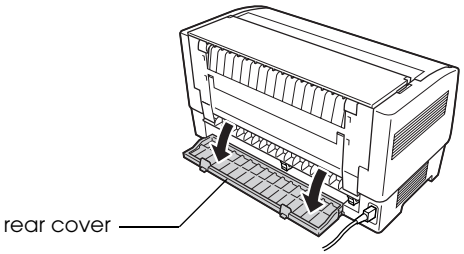
Follow the steps below to install an optional interface card.

Note:
If you install an optional interface card, make sure you set the interface you use in the SelecType mode. See "Changing the settings in the SelecType mode" on page 98 for details.

1. Turn off both your printer and your computer. Then remove all power and interface cables from the printer.

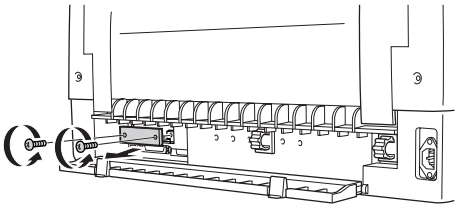
2. Turn the printer so that the rear cover faces you.

3. Open the rear cover.

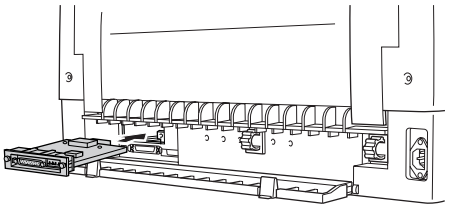


4. Be sure to set any switches and jumpers on the card, as necessary. See the interface card's manual for details. Make sure that you set jumper JG to on, or the card will not work properly. (To set the jumper to on, cover both wires of the terminal with the rectangular jumper plug.)

5. Use a screwdriver to remove the screws securing the interface shield plate; remove the shield plate.

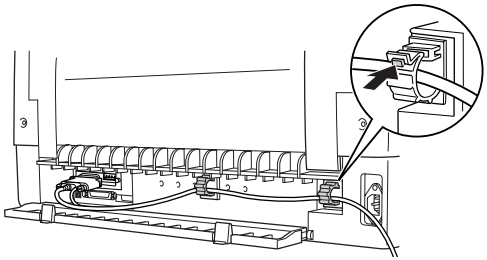


6. Slide the interface card into the grooves in the interface slot. Push it in firmly to make sure it connects to the printer's internal socket.



7. Secure the interface with the screws provided with the card.

8. Plug the connector cable into the interface card as shown.



9. Plug the other end of the cable into your computer.

10. Close the interface cover.

11. Plug the power cord into your printer and an electrical outlet.

Using a serial interface card

To use a serial interface card (C82305✻ or C82306✻), see the sections below to set the correct baud rate, handshake timing, and error handling. For all other data transfer conventions, such as word structure and communications protocol, see your interface card manual.

Selecting a baud rate

You can select from the following baud rates: 300, 600, 1200, 2400, 4800, 9600, and 19200 bps (bits per second). To set the baud rate, see the bit-rate selection table in your interface card manual.

Handshake timing

When the unused area for data in the input buffer drops to 256 bytes, the printer outputs an X-OFF code or sets the DTR flag to 1 (MARK) to indicate that it cannot receive data. When the unused area increases to 512 bytes, the printer outputs an X-ON code or sets the DTR flag to 0 (SPACE) to indicate that it is ready to receive data.

Error handling

When the printer detects a parity error, it prints an asterisk (✻). The printer ignores all other errors, including framing and overrun errors.

Print Server

You can use this printer as a network printer by installing a print server in the printer's parallel interface port. See the Administrator's Manual packaged with this option for instructions on installation and use.

The following Printer Servers can be used:

- ❏ EpsonNet 10/100 Base Tx Int. Print Server 3 (C82435*)

Setting the IP address from the control panel

Follow the steps below to get the IP address using the control panel.

1. Turn on the printer.
2. Press the Menu (Tear Off and Top of Form) buttons to enter the SelecType mode.
3. Press the Item⬆ (Font) or Item⬇ (Pitch) button to select the Get IP address setting and set the setting to Panel using the Set⬆ (Tear Off) or Set⬇ (Top of Form) button.
4. Press the Item⬇ (Pitch) button to select the `IP byte 1`.
5. Change the number for the `IP byte 1` using the Set⬆ (Tear Off) or Set⬇ (Top of Form) button.
6. Press the Item⬇ (Pitch) button to select the next byte and change the number using the Set⬆ (Tear Off) or Set⬇ (Top of Form) button.
7. Repeat step 6 until the number for the `IP byte 4` is set.

8. Set the numbers for SM byte 1 to 4 and GW byte 1 to 4 in the same way as the IP byte 1 to 4.

9. Confirm the numbers that you selected for the IP byte 1 to 4, SM byte 1 to 4, and GW byte 1 to 4 are correctly set.

10. When you finish making settings, press the Menu (Tear Off and Top of Form) buttons.

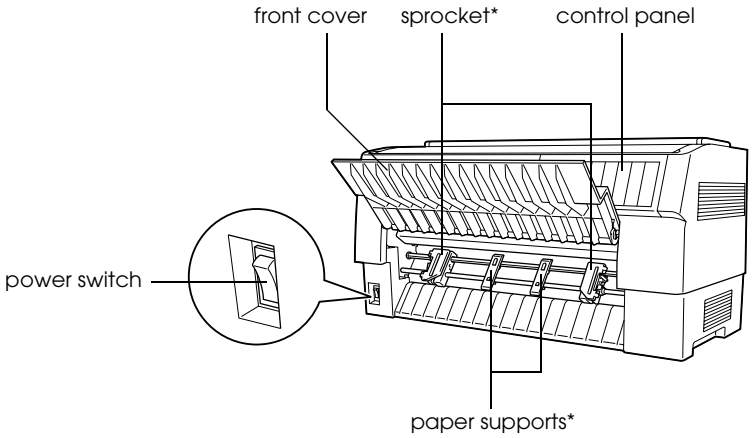
11. The LCD displays Save Setting. If you want to save the settings, select Yes by pressing the Set▲ (Tear Off) button. If you do not want to save the settings, select No by pressing the Set▼ (Top of Form) button.

12. Turn off the printer.

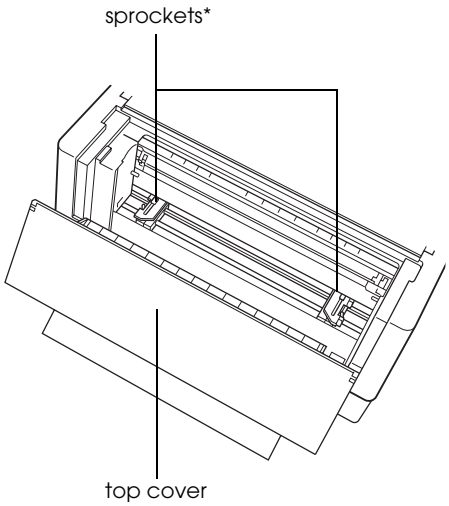
Appendix A

Product Information

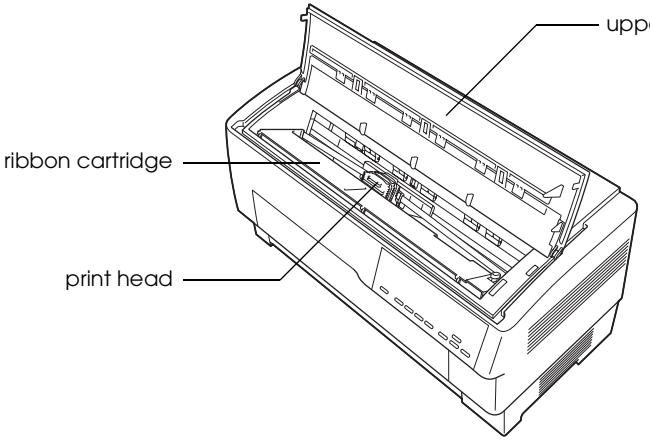
Printer Parts

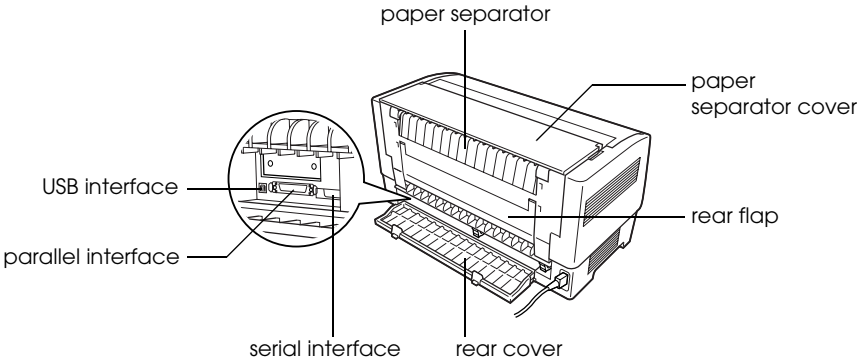


* front tractor unit parts


sprockets*
top cover

* rear tractor unit parts





Printer Specifications

Mechanical

Printing method:	9-pin impact dot matrix	
Printing speed:	High speed draft	1550 cps at 10 cpi
	Draft	1320 cps at 10 cpi
	NLQ	330 cps at 10 cpi
Printing direction:	Bidirectional logic seeking for text and graphics printing. Unidirectional text or graphics printing can be selected using software commands.	
Line spacing:	1/6-inch or programmable in 1/432-inch increments	
Printable columns:	136 columns (at 10 cpi)	
Resolution:	Maximum 240 × 144 dpi (NLQ)	
Paper feed methods:	Push tractor (front, rear) Push and pull tractor (additional tractor is required) (front, rear)	
Paper feed speed:	Continuous	381 mm/second 15 inches/second
	Intermittent	25 msec/line at 1/6 inch line spacing

Reliability:	Total print volume	133 million lines (except print head) MTBF 20,000 POH (25% duty)
	Print head life	200 million strokes/wire approx. 400 million characters (Draft, 10 cpi, 14 dots/character)
Dimensions and weight:	Height	363 mm (14.3 inches)
	Width	700 mm (27.6 inches)
	Depth	378 mm (14.9 inches)
	Weight	approx. 34 kg (75 lb)
Ribbon:	Black ribbon cartridge	S015384
	Ribbon life	approx. 15 million characters (Draft, 10 cpi, 14 dots/character)
Acoustic noise:	Approx. 58 dB (A) (ISO 7779 pattern)	

Electronic

Interfaces:	One standard bidirectional, 8-bit, parallel interface with IEEE 1284 nibble mode support, one USB (ver 1.1) interface and one optional Type B interface slot
Buffer:	128KB
Fonts:	Bitmap fonts
	Bar code fonts
	EAN-13, EAN-8, Interleaved 2 of 5, UPC-A, UPC-E, Code 39, Code 128, POSTNET

Character tables:

Standard

One italic and 12 graphics character tables:

Italic table,
PC 437 (US, Standard Europe),
PC 850 (Multilingual),
PC 860 (Portuguese),
PC 861 (Icelandic), PC 865 (Nordic),
PC 863 (Canadian-French), BRASCII, Abicomp,
ISO Latin 1, Roman 8, PC 858, ISO 8859-15

Expanded

One italic and 38 graphics character tables:

Italic table,
PC 437 (US, Standard Europe),
PC 850 (Multilingual),
PC 860 (Portuguese),
PC 861 (Icelandic), PC 865 (Nordic),
PC 863 (Canadian-French), BRASCII, Abicomp,
ISO Latin 1, Roman 8, PC 858, ISO 8859-15, PC 437 Greek,
PC 852 (Eastern Europe),
PC 853 (Turkish), PC 855 (Cyrillic),
PC 857 (Turkish), PC 866 (Russian),
PC 869 (Greek), MAZOWIA (Poland),
Code MJK (CSFR),
ISO 8859-7 (Latin/Greek),
ISO Latin 1T (Turkish),
Bulgaria (Bulgarian),
PC 774 (LST 1283: 1993),
Estonia (Estonian), PC 771 (Lithuanian),
ISO 8859-2, PC 866 LAT. (Latvian),
PC 866 UKR (Ukranian),
PC437 Slovenia, PC MC, PC1250,
PC1251, PC APTEC (Arabic),
PC 708 (Arabic), PC 720 (Arabic),
PC AR 864 (Arabic)

Character sets: 13 international character sets and one legal character set:

USA, France, Germany, UK, Denmark I, Sweden, Italy, Spain I, Japan, Norway, Denmark II, Spain II, Latin America, Legal

Electrical

Rated voltage range:	100 to 240 V
Input voltage range:	90 to 264 V
Rated frequency range:	50 to 60 Hz
Input frequency range:	49.5 to 60.5 Hz
Rated current:	5.4 A (maximum 11 A)
Power consumption:	Approx. 185 W (ISO/IEC 10561 letter pattern) Approx. 7.5 W in sleep mode

Environmental

	Temperature	Humidity (without condensation)
Operation (plain paper)	5 to 35°C (41 to 95°F)	10 to 80% RH
Operation (recycled paper, envelope, label, or roll paper)	15 to 25°C (59 to 77°F)	30 to 60% RH
Storage	-30 to 60°C (-22 to 140°F)	0 to 85% RH

Paper

Note:

❏ *Use recycled paper, labels, continuous forms with labels, and overlapping multi-part forms only under normal temperature and humidity conditions described below.*

Temperature: 15 to 25°C (59 to 77°F)
Humidity: 30 to 60% RH

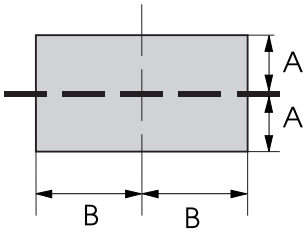
❏ *Do not load paper that is curled, folded, or crumpled.*

Continuous paper (Single sheets and multi-part forms)

❏ Use only continuous paper with less than 5 mm diameter punch holes.

❏ The ratio of the cut/uncut length at the perforation should be between 2:1 and 5:1.

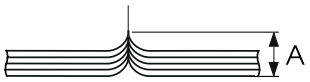
❏ If the horizontal and vertical perforation cuts cross, do not print in the area illustrated below.



A 3 mm

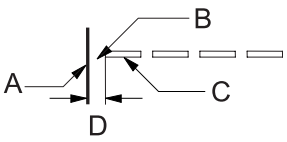
B 28 mm

❏ The thickness of the perforation part when extended should be 2 mm or less.



A 2 mm or less

❏ The perforation between pages should not extend all the way to the edges of the paper. Uncut length on the edges should be 1 mm or more.



A paper edge

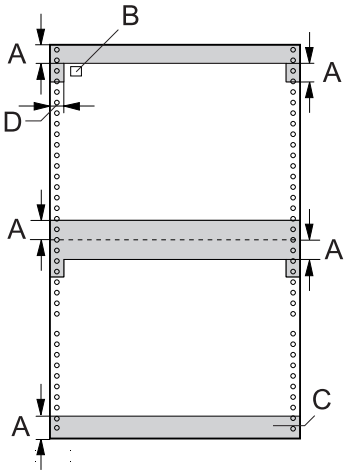
B uncut part

C cut part

D 1 mm or more

❏ When using pre-printed paper, the reflectance of the pre-printed color should be 60% or less.

❏ When using pre-printed paper, do not use paper pre-printed in the area illustrated below.



A 12 mm

B first dot

C Colored area should not be pre-printed.

D 5 mm

Continuous paper (Single sheets):

		Rear entry / Front entry	
		Minimum	**Maximum**
Width	(mm)	76.2	419.1
	(inch)	3	16.5
Length	(mm)	76.2	558.8
	(inch)	3	22
Thickness	(mm)	0.065	0.10
	(inch)	0.0025	0.0039
Weight	(g/m^2)	52	82
	(lb)	14	22
Quality		Plain paper and recycled paper with point gluing or paper stapling on both sides	

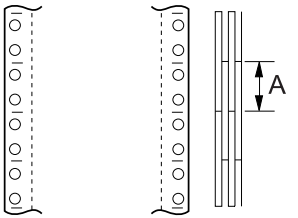
Continuous paper (Multi-part forms):

		Rear entry		Front entry	
		Minimum	**Maximum**	**Minimum**	**Maximum**
Width	(mm)	76.2	419.1	76.2	419.1
	(inch)	3	16.5	3	16.5
Length	(mm)	76.2	558.8	76.2	558.8
	(inch)	3	22	3	22
Copies		1 original + 6 copies		1 original + 9 copies	
Thickness	(mm)	0.12	0.53	0.12	0.79
	(inch)	0.0047	0.021	0.0047	0.031
Weight	(g/m^2)	41	56	41	56
	(lb)	11	15	11	15
Quality		Carbonless or carbon-backed multi-part forms with point gluing or paper stapling on both sides			

- ❏ Do not load thick paper, such as multipart forms with more than seven parts, with the rear tractor.

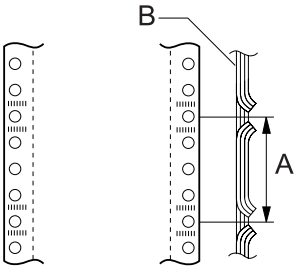
- ❏ Form sheets of continuos multi-part forms should be securely joined together along the left and right edges by crimping or spot-gluing. See the illustration below for details.

spot-gluing on both sides



A 25.4 mm (1 inch) or less

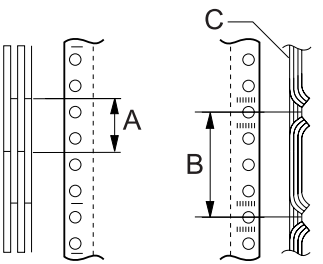
crimping on both sides



A 76.2 mm (3 inch) or less

B printing side

spot-gluing and crimping on opposing sides

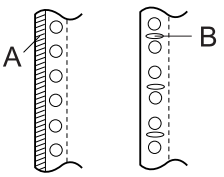


A 25.4 mm (1 inch) or less

B 76.2 mm (3 inch) or less

C printing side

❏ Do not use continuous multi-part forms that are joined with metal staples, one side crimping, tape-staples, or bar-gluing.



A bar-gluing

B metal stapling

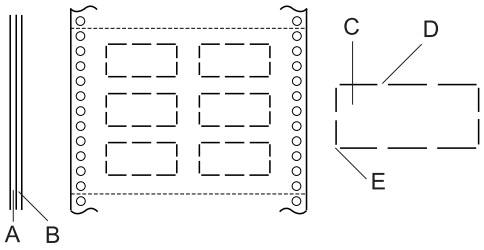
Labels

		Rear entry / Front entry	
		Minimum	**Maximum**
Width of backing sheet	(mm)	76.2	419.1
	(inch)	3	16.5
Length of backing sheet	(mm)	76.2	558.8
	(inch)	3	22
Thickness of backing sheet	(mm)	0.07	0.09
	(inch)	0.0028	0.0035
Total thickness	(mm)	0.16	0.19
	(inch)	0.0063	0.0075
Label weight	(g/m^2)	64	
	(lb)	17	
Quality		Plain paper or the same quality labels	

❏ Use only labels on continuous backing sheets.

❏ Epson recommends using labels whose backing sheet is entirely covered with label material.

Labels whose backing sheet is entirely covered with label material:



A backing sheet

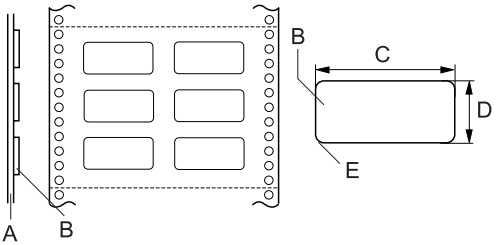
B label sheet

C label

D There should be several uncut areas on each side

E Corners should not be cut

Labels whose backing sheet is not covered with label material:



A backing sheet

B label

C 63.5 mm (2.5 inches) or more

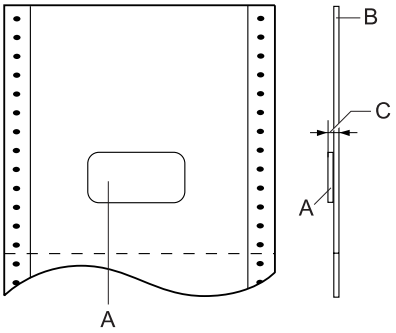
D 23.8 mm (15/16 inch) or more

E R2.5 mm (0.1 inch) or more

Continuous forms with labels

		Rear entry		Front entry	
		Minimum	**Maximum**	**Minimum**	**Maximum**
Width of backing sheet	(mm)	76.2	419.1	76.2	419.1
	(inch)	3	16.5	3	16.5

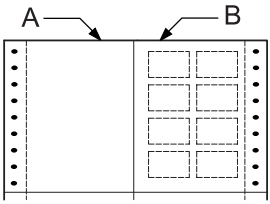
		Rear entry		Front entry	
		Minimum	**Maximum**	**Minimum**	**Maximum**
Length of backing sheet	(mm)	76.2	558.8	76.2	558.8
	(inch)	3	22	3	22
Total thickness	(mm)	0.065	0.53	0.065	0.79
	(inch)	0.0025	0.021	0.0025	0.031



A label

B backing sheet

C total thickness:
0.53 mm (0.021 inch) or less (Rear Entry)
0.79 mm (0.031 inch) or less (Front Entry)

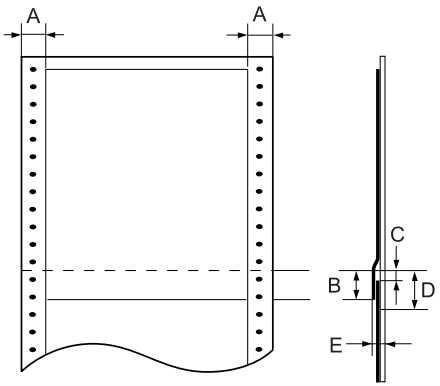


A continuous paper

B labels paper

Overlapping multi-part forms

		Rear entry		Front entry	
		Minimum	**Maximum**	**Minimum**	**Maximum**
Width of backing sheet	(mm)	76.2	419.1	76.2	419.1
	(inch)	3	16.5	3	16.5
Length of backing sheet	(mm)	76.2	558.8	76.2	558.8
	(inch)	3	22	3	22
Total thickness	(mm)	0.13	0.53	0.13	0.79
	(inch)	0.0051	0.021	0.0051	0.031



A 13 mm (0.51 inch) or more

B From the perforation to the bottom of the previous overlapping form:
13.3 mm (0.52 inch) or less

C From the perforation to the top of the next overlapping form:
3.3 mm (0.13 inch) or more

D From the perforation to the bottom edge of the glue point area:
17 mm (0.67 inch) or less

E Total thickness including glue point dilation:
0.53 mm (0.021 inch) or less (Rear Entry)
0.79 mm (0.031 inch) or less (Front Entry)

Printable area

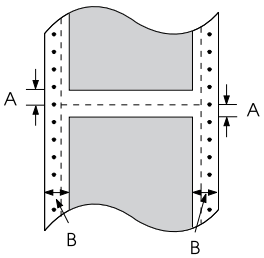
Note:

- ❏ *When you use paper that is less than 4 inches (101.6 mm) wide, the left margin is fixed at 13 mm (0.51 inch) regardless of paper type. Setting the left margin to larger than that may cause a defect when beginning on a new line or cause a skew.*

- ❏ *When you use continuous paper with labels that is more than 16 inches (406.4 mm) wide while the optional pull tractor is installed, the left margin may be set to 18 mm (0.71 inch) or more.*

- ❏ *When loading paper with the front tractor, set the Page length for front tractor setting to* `6 inches` *or more.*

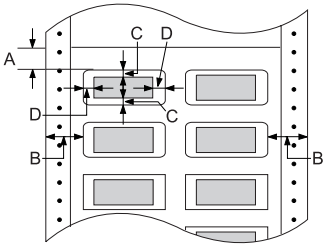
Continuous paper



A The minimum top and bottom margins (above and below the perforation) are 4.2 mm (0.17 inch).

B The minimum left and right margins are 13 mm (0.51 inch).

Labels



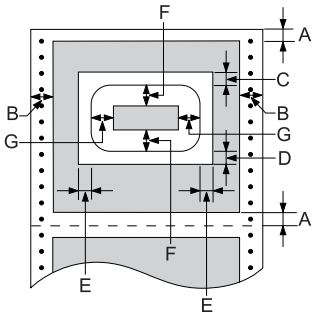
A The minimum top margin is 2.2 mm (0.09 inch).

B The minimum left and right margins are 13 mm (0.51 inch).

C The minimum top and bottom margins on label are 2 mm (0.08 inch).

D The minimum left and right margins on labels are 3 mm (0.12 inch).

Continuous forms with labels



A The minimum top and bottom margins are 4.2 mm (0.17 inch).

B The minimum left and right margins are 13 mm (0.51 inch).

C The minimum top margin from labels is 20.2 mm (0.8 inch)

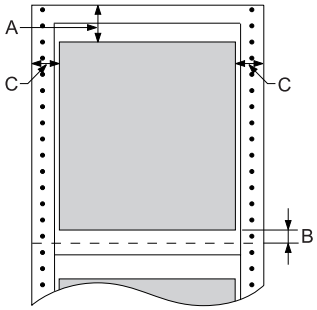
D The minimum bottom margin from labels is 16.6 mm (0.65 inch)

E The minimum left and right margins from labels are 30.9 mm (1.22 inches)

F The minimum top and button margins on labels are 2 mm (0.08 inch)

G The minimum left and right margins on labels are 3 mm (0.12 inch)

Overlapping multi-part forms



A The minimum top margin is 26.3 mm (1.04 inch)

B The minimum bottom margin is 16.6 mm (0.65 inch).

C The minimum left and right margins are 16 mm (0.63 inch).

Command Lists

Your printer supports the following EPSON ESC/P control codes and IBM PPDS emulation control codes.

For more information about the commands, contact Epson Customer Services. See "Contacting Customer Support" on page 128 for details.

EPSON ESC/P control codes

Selecting an EPSON ESC/P printer in your software allows you to use advanced fonts and graphics.

General operation:

ESC @, ESC U, ESC EM F/B/C/A/V

Paper feeding:

FF, LF, ESC 0, ESC 1, ESC 2, ESC 3, ESC A, CR

Page format:

ESC (C, ESC C, ESC C 0, ESC Q, ESC l, ESC (c, ESC N, ESC O, ESC (U

Print position motion:

ESC $, ESC \, ESC D, HT, ESC B, VT, ESC J

Font selection:

ESC k, ESC x, ESC y, ESC P, ESC M, ESC g, ESC p, ESC 4, ESC 5, ESC E, ESC F, ESC !

Font enhancement:

ESC W, DC4, SO, DC2, SI, ESC w, ESC G, ESC H, ESC T, ESC S, ESC -

Spacing:

ESC Space

Character handling:

ESC t, ESC (t, ESC R, ESC %, ESC &, ESC :, ESC I, ESC 6, ESC 7

Bit image:

ESC K, ESC L, ESC Y, ESC Z, ESC *, ESC ^

Bar code:

ESC (B

Production

ESC |

IBM PPDS emulation control codes

This printer emulates the IBM Proprinter using the commands below.

General operation:

NUL, DC3, ESC j, BEL, CAN, DC1, ESC Q, ESC [K, ESC U, ESC [F

Paper feeding:

FF, LF, ESC 5, ESC A, ESC 0, ESC 1, ESC 2, ESC 3, CR, ESC]

Page format:

ESC C, ESC C0, ESC X, ESC N, ESC O, ESC 4

Print position motion:

ESC d, ESC R, ESC D, HT, ESC B, VT, ESC J

Font selection:

DC2, ESC P, ESC :, ESC E, ESC F, ESC I, ESC [d, ESC [I

Font enhancement:

DC4, SO, ESC SO, ESC W, ESC [@, SI, ESC SI, ESC G, ESC H, ESC T, ESC S, ESC -, ESC _

Spacing:

BS, SP

Character handling:

ESC 6, ESC 7, ESC [T, ESC ^, ESC \

Bit image:

ESC K, ESC L, ESC Y, ESC Z

Bar code:

ESC [f, ESC [p

Download:

ESC = (draft mode only)

Standards and Approvals

Universal (UPS) model:

Safety	UL60950
	CSA C22.2 No. 60950
	EN 60950
EMC	FCC part 15 subpart B class B
	CAN/CSA-CEI/IEC CISPR22 Class B
	EN 55022 Class B
	EN 55024
	EN 61000-3-2
	EN 61000-3-3

Australian model:

EMC	AS/NZS CISPR22 Class B

Cleaning the Printer

To keep your printer operating at its best, you should clean it thoroughly several times a year.

Follow these steps to clean the printer:

1. Remove any paper loaded in the printer, and turn off the printer. Make sure that all of its covers are closed.

2. Remove the ribbon cartridge. If an optional pull tractor or perforation cutter is installed, remove it.

3. Use a soft brush to carefully brush away all dust and dirt from the outer.

4. If the outer case is still dirty or dusty, clean it with a soft, clean cloth dampened with mild detergent dissolved in water. Keep the printer cover and front cover closed to prevent water from getting inside the printer.

Caution:

- ❏ *Never use alcohol or thinners to clean the printer; these chemicals can damage the printer components as well as the case.*
- ❏ *Be careful not to get water on the printer mechanism or electronic components.*
- ❏ *Do not use a hard or abrasive brush.*

Do not spray the inside of the printer with lubricants; unsuitable oils can damage the printer mechanism. Contact your Epson dealer if you think lubrication is needed.

Transporting the Printer

If you need to transport your printer some distance, carefully repack it using the original box and packing materials.

Follow these steps to repack the printer in its original packing materials:



Warning:
You need to move the print head by hand to remove the ribbon cartridge. If you have just used the printer, the print head may be hot; let it cool for a few minutes before touching it.

1. Remove any paper loaded in the printer. Make sure the printer is turned off.

2. Unplug the power cord from the electrical outlet; then disconnect the interface cable from the printer.

3. Remove the ribbon cartridge. If any options are installed, remove them and pack them in their original boxes.

4. Make sure the print head is not hot. Then remove the ribbon cartridge.

5. Make sure that all covers of the printer are closed.

6. Repack the printer, ribbon cartridge, and power cord (if necessary) in their original packing materials and place them in the printer's original box.

Glossary

auto line feed
When this option is turned on in the SelecType mode, each carriage return (CR) code is automatically followed by a line feed (LF) code.

bidirectional printing
Printing in which the print head prints in both directions (bidirectionally) from left to right and then right to left. This increases the print speed but may reduce precise vertical alignment. See also *unidirectional printing*.

character table
A collection of letters, numbers, and symbols that provides you with the set of characters used in a particular language.

characters per inch (cpi)
The number of characters that can fit in one inch of a text line, determined by the size of the characters. See also *pitch*.

continuous paper
Paper that has sprocket-feed holes on both long edges, is perforated between pages, and is supplied in a folded stack. Also called fanfold paper.

control codes
Special codes used to control printer functions, such as a carriage return or line feed, instead of printing characters.

cpi
See *characters per inch (cpi)*.

default
Value settings that take effect when a device (such as a printer) is turned on, reset, or initialized.

dithering
A halftoning method in which dots are printed in a predetermined pattern to simulate a shade or tone. Dithering works best for images with solid colors, such as charts and graphs. See also *halftoning*.

dot matrix
A method of printing in which each letter or symbol is formed by a pattern (matrix) of individual dots.

draft
The print mode used by your printer when you select Draft as the font. The Draft font uses fewer dots per character for faster printing. See also *near letter quality (NLQ)*.

driver
See *printer driver*.

ESC/P
Abbreviation for EPSON Standard Code for Printers, the system of commands your computer uses to control your printer. It is standard for all Epson printers and supported by most application software for personal computers.

fanfold paper
See *continuous paper*.

font
A style of type designated by a name such as Roman or Sans Serif.

form feed (FF)
A control panel button and control code that advances the paper to the next top-of-form position.

halftoning
A method of using dot patterns to represent an image. Halftoning makes it possible to produce varying shades of gray using only black dots, or a nearly infinite array of colors using only a few colors of dots. See also *dithering*.

hex dump
A troubleshooting method that helps identify the cause of communication problems between the printer and the computer. When the printer is in hex dump mode, it prints each code that it receives in hexadecimal notation as well as in ASCII codes that stand for characters. Also called data dump.

interface
The connection between the computer and the printer through which print data is transmitted to the printer.

landscape
Printing that is oriented sideways on the page. This orientation gives you a page that is wider than it is high and is useful for printing spreadsheets. See also *portrait*.

line feed (LF)
A control panel button and control code that advances the paper one line space.

Micro Adjust function
A printer function that allows you to precisely adjust the tear-off, top-of-form, and loading positions.

near letter quality (NLQ)
The print mode used by your printer to produce near letter-quality fonts for better readability and appearance. Print speed is slower. See also *draft*.

pitch
The horizontal size of the font, which is measured by the number of characters per inch (cpi). The standard is 10 cpi. See also *characters per inch (cpi)*.

portrait
Printing that is oriented upright on the page (as opposed to landscape, in which printing is sideways on the page). This is the standard orientation for printing letters or documents. See also *landscape*.

printer driver
A software program that sends commands for using the functions of a particular printer.

resolution
A measure of the amount of detail that can be represented. Resolution of printed images is measured by using the number of dots per inch (dpi).

self test
A method for checking the operation of the printer. When you run the self test, an internally stored self-pattern is printed.

standby position
The position of your continuous paper when it is attached to the push tractor but not loaded in the printer.

tear-off position
The position of your continuous paper where you can tear off your printed pages at the printer's tear-off edge. Using the Micro Adjust function, you can adjust the tear-off position so that the paper's perforation is aligned with the tear-off edge.

top-of-form position
The position on the paper that the printer recognizes as the first printable line. This is the default top margin position. Using the Micro Adjust function, you can adjust the top-of-form position.

unidirectional printing
Printing in which the print head prints in one direction only. Unidirectional printing is useful for printing graphics because it provides precise vertical alignment. You can select unidirectional printing using the printer's SelecType mode. See also *bidirectional printing*.

Index

Numerics

0 slash, 92

A

A.G.M. (IBM PPDS), 94
Aligning vertical lines, 126
Auto CR (IBM PPDS), 94
Auto I/F (interface) wait time, 93
Auto line feed, 92
Auto tear-off, 91

B

Bidirectional adjustment mode, 126
Bidirectional printing (Bi-D), 92
Built-in font, 86
 selecting, 86
Button
 Font, 82
 LF/FF, 82
 Load/Eject, 82
 Pause, 82
 Pitch, 82
 Tear-Off/Bin, 82
Buzzer
 beep pattern, 105
Buzzer (beeper) setting, 94

C

Canceling printing, 76, 127
Clients
 with Windows Me or 98, 68
 with Windows NT 4.0, 73
 with Windows XP or 2000, 70
Contacting EPSON, 128
Continuous paper
 problems, 111
Control panel

buttons and lights, 82
Customer support, 128

D

Default settings
changing, 101
default settings mode, 97
Diagnosing the problem, 104
Driver (printer driver), 43

E

Electrical, 170
ENERGY STAR compliance, 10
EPSON Status Monitor 3, 43, 58, 106
accessing, 60
installing, 61
setting up, 59
Error indication, 105
ESC/P, 92

F

Font selection mode, 86

H

Hex dump, 108
High Speed Draft (HSD), 86

I

I/F (interface) mode, 92
IBM PPDS emulation, 92
IP address
setting, 161

L

Lock-out mode, 103

P

Packet mode, 93

Page length for tractor, 90
Paper jam
 clearing, 125
Paper specifications, 171
Parallel I/F (interface) bidirectional mode, 93
Parallel interface, 92
Printable area, 181
Print direction, 92
Printer
 sharing, 62
Printer driver
 accessing
 from Windows 2000 or Windows NT 4.0, 49
 from Windows Me or 98, 44
 settings, 54
 uninstalling, 77

R

Ribbon cartridge
 replacing, 130

S

SelecType
 changing, 98
 SelecType mode, 90
Self test, 107
Single sheets
 problems, 111
Skip over perforation, 90
Specifications
 built-in fonts, 170
 command lists
 ESC/P, 183
 IBM PPDS emulation, 183
 environmental, 171
 standards and approvals, 186
Status Monitor 3, 58, 106

T

Tear-Off/Bin button, 82
Technical support, 128
Troubleshooting

network problems, 121
option problems, 120
paper loading or feeding problems, 111
power supply problems, 110
printing or printout quality problems, 115
printing position problems, 113
USB problems, 121

U

Unidirectional (Uni-d) printing, 92
Uninstalling
printer software, 77
USB device driver, 79
USB interface, 92
problems, 121